



## 저작자표시-비영리-변경금지 2.0 대한민국

이용자는 아래의 조건을 따르는 경우에 한하여 자유롭게

- 이 저작물을 복제, 배포, 전송, 전시, 공연 및 방송할 수 있습니다.

다음과 같은 조건을 따라야 합니다:



저작자표시. 귀하는 원저작자를 표시하여야 합니다.



비영리. 귀하는 이 저작물을 영리 목적으로 이용할 수 없습니다.



변경금지. 귀하는 이 저작물을 개작, 변형 또는 가공할 수 없습니다.

- 귀하는, 이 저작물의 재이용이나 배포의 경우, 이 저작물에 적용된 이용허락조건을 명확하게 나타내어야 합니다.
- 저작권자로부터 별도의 허가를 받으면 이러한 조건들은 적용되지 않습니다.

저작권법에 따른 이용자의 권리는 위의 내용에 의하여 영향을 받지 않습니다.

이것은 [이용허락규약\(Legal Code\)](#)을 이해하기 쉽게 요약한 것입니다.

[Disclaimer](#)

**Master's Thesis of Science in Architecture**

**A Study on Kengo Kuma's Architecture of Anti-Object**

- Based on Martin Heidegger's Notion of Thing -

**쿠마 켄고 건축의 반 (反) 오브젝트의 관한 연구**

-마르틴 하이데거의 물(物)의 이론을 중심으로-

August 2017

Graduate School of Engineering

Seoul National University

Architecture Major

**WONG KEE YUN**



# A Study on Kengo Kuma's Architecture of Anti-Object

- Based on Martin Heidegger's Notion of Thing -

Submitting a Master's thesis of Science in Architecture

August 2017

Graduate School of Engineering

Seoul National University

Architecture Major

WONG KEE YUN

Confirming the Master's thesis written by

WONG KEE YUN

August 2017

Chair

백인



Vice Chair

최두현



Examiner

조항민





# **Abstract**

## **A Study of Kengo Kuma's Architecture of Anti-Object**

- Based on Martin Heidegger's Notion of Thing -

This thesis focuses on the study of Kengo Kuma's architecture of anti-object which is based on Martin Heidegger's notion of things. Kuma has always been perturbed by how contemporary architecture is being built separated from the surroundings and thus establish itself as distinct objects. People are now inclined to understand architecture as a separated object instead of something that is part of the nature.

The situation became more serious with the "concrete method" which dominated the world of architecture since the 20<sup>th</sup> century up until today. According to Kuma, the architecture as an edifice object is divided its relationship with the environment. This problem was further aggravated with the encouragement of formalism.

Kuma's idea of eliminating the object from the surrounding as the method allowed him to achieve his notion of anti-object. The Kiro-san Observatory located at Ehime Prefecture built in 1991 is the first project in which he literally erased the architecture by burying the whole building into the hill. He claims that the observatory is a "void" as compare to the idea of form taken by conventional

architecture as an “object”.

Kuma developed the idea of anti-object by designing the building in smaller elements in order to reduce its bulkiness. In Kuma terms, he defined this technique as “particlizing” architecture. The idea of “particlizing” is not limited only to architectural elements but also as a philosophy in which he asserted that through particulating, we can avoid the dominance of a certain matter against others. This has led him to delve into the varieties of building materials to subdue the dominance of the “concrete method”.

However, his enthusiasm with building materials led him to the objectifying of the architecture instead of “anti-object”. According to Martin Heidegger, a German Philosopher, the more we attempt to explore the traits of something, the further we stay away from the essences of that particular thing. The thingness of the thing is only reveals to us if we set it back to its original essence—its thing-being.

This study adopts the philosophy of Martin Heidegger in his phenomenology of thingness as the reference to discuss Kengo Kuma’s architecture of anti-object. According to Heidegger, the prevailing way of thinking in the West sees thing as a mere and separated object. Because of this, the direct human experience with the thing had been neglected. The notion of object is inadequate for Heidegger, too abstract, pretentious and detached from the daily experiences, and this is what the scientific world perspective propagandizes.

Kuma attempts to eliminate and reduce the massiveness of the object to

reinstate the relationship between architecture and the natural environment. However, according to Heidegger, the thing and the natural world are in an interdependent relationship situation. In other words, architecture is a thing that reinstates the relationship between human beings and the natural world, by its appearance as a thing instead as a distinct object. Therefore, the relationship was reinstated through the appearance of thing instead through its status of distinct object.

A deeper understanding and discussion on Kuma's architecture of anti-object is provided in this study. The study also includes Kuma's selected projects that have been built during 1990 to 2000 to provide an understanding of how his strategies of anti-object developed over the course of his career.

Wong Kee Yun

Department of Architecture & Architectural Engineering

Graduate School of Engineering

Seoul National University

Keyword: Kengo Kuma; anti-object; Martin Heidegger; thing; Relationship

Student No.: 2015-22316



# CONTENTS

Abstract

Table of Content

List of Tables

List of Figures

## **Chapter 1** Introduction

1.1 Research Background

1.2 Research Objectives

1.2 Research Methodology

## **Chapter 2** Object, Anti-Object and Thing

2.1 Kengo Kuma's Notion of Anti-Object

2.1.1 Background

2.1.2 The Commercialization of Housing Complexes

2.1.3 The Dominance of the Building Material

2.1.4 Influenced of Bruno Taut

2.2 Marin Heidegger's Notion of "Thing"

## **Chapter 3** Strategies of Anti-Object

3.1 Introduction

3.2 The Elimination of the Object

3.2.1 The Kiro-san Observatory

### 3.2.2 The Kitakami Canal Museum

## 3.3 The Sensuousness of the Material

### 3.3.1 The Water/Glass House

## 3.4 Dematerialization

### 3.4.1 The Stone Museum

### 3.4.2 The Museum of Hiroshige

### 3.4.3 Kengo Kuma's Strategy of Particlizing in the Wider Perspective

## **Chapter 4** Analysis on Kuma's Notion of Anti-Object

### 4.1 Introduction

### 4.2 Architecture as an Identity of a Place

### 4.3 The Objectification of Building Material

### 4.4 The Domination use of a Single Technique

### 4.5 From Erasing Architecture to Organic Architecture

## **Chapter 5** Conclusion

## Bibliography

## Abstract (Korean)

## LIST OF TABLES

**Table 3-1** List of Projects by Kengo Kuma from 1990 to 2000.

**Table 3-2** Selected Case Studies of Kengo Kuma's works from 1990 to 2000.

## LIST OF FIGURES

**Figure 2-1** From the left: Le Corbusier's Villa Savoye (1931), Mies van der Rohe's Barcelona Pavilion (1929) and Rem Koolhaas's CCTV Building (2012). (source from the left: Le Corbusier Foundation, Fundacio Mies van der Rohe, OMA)

**Figure 2-2** Cross-Section of Hyuga Villa. (source from Kuma, K. (2010). *Fan zao xing*. [Anti Object], Guilin Shi: Guangxi shi Fandaxue Chuban She)

**Figure 2-3** Katsura Imperial Villa, Kyoto. (17<sup>th</sup> Century) (courtesy of Kyoto City Web)

**Figure 3-1** M2 Building, Tokyo, Japan. (courtesy of Kengo Kuma & Associates)

**Figure 3-2** Kiro-san Observatory. (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 43.)

**Figure 3-3** Site Plan of Kiro-san Observatory. (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 44.)

**Figure 3-4** Cross Section of Kiro-san Observatory. (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 45.)

**Figure 3-5** East Elevation of Kiro-san Observatory. (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 45.)

**Figure 3-6** Entrance of Kitakami Canal Museum (source from Bognár, B. & Kuma, K. (2005), *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 76.)

**Figure 3-7** Floor plan of Kitakami Canal Museum. (redrawn by author based on Bognár, B. &

Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 77.)

**Figure 3-8** View of Kitakami Canal Museum from the canal. (Source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 78.)

**Figure 3-9** Ewha Woman's University Campus Centre. (courtesy of Dominique Perrault Architecture)

**Figure 3-10** Water/Glass House, Atami. (1995) (courtesy of Kengo Kuma & Associates)

**Figure 3-11** Floorplan of Water/Glass House, Atami. (1995) (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 50.)

**Figure 3-12** Water/Glass House, Atami. (1995) (Source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 48.)

**Figure 3-13** Stainless Steel Louvers of the Water/Glass House (1995) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 54.)

**Figure 3-14** Floorplan of Stone Museum (2000) (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 83.)

**Figure 3-15** View of courtyard from main gallery, Stone Museum (2000) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 86.)

**Figure 3-16** Detail section of the stone wall. (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 28.)

**Figure 3-17** Detail of the cut stone louvers. (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 20.)

**Figure 3-18** View from the street to the Stone Museum (2000) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 84.)

**Figure 3-19** Studies of stone patterns. (source from Kuma, K. (2004). *Kengo Kuma: Materials*,

*Structures, Details*, Basel: Birkhäuser, p. 25.)

**Figure 3-20** “A sudden shower over Ohashi and Atake” by Ando Hiroshige. (source from Forrer, M. (1997). *Hiroshige: prints and drawings*. Munich, New Yor, Prestel: Royal Academy of Arts.

**Figure 3-21** Site Plan of Museum of Ando Hiroshige (2000) (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 38.)

**Figure 3-22** Floorplan of Museum of Hiroshige (2000) (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 39.)

**Figure 3-23** Entrance to the Museum of Hiroshige (2000) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 92.)

**Figure 3-24** Detail of the overhang of the roof. (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 43.)

**Figure 3-25** View of North Elevation (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 94.)

**Figure 3-26** From top: North Elevation, South Elevation and West Elevation of Museum of Hiroshige (2000) (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 38.)

**Figure 4-1** Falling Water by Frank Llyod Wright. (1935) (courtesy of Frank Llyod Wright Foundation)

**Figure 4-2** Water/Glass House, Atami (1995). (courtesy of Kengo Kuma & Associates)

**Figure 4-3** Chidori Pavilion in 2007 Milano Salone. (courtesy of Kengo Kuma & Associates)

**Figure 4-4** GC Prostho Museum (2010). (courtesy of Kengo Kuma & Associates)

**Figure 4-5** Nam June Paik Museum Competition, Korea (2003). (source from Kuma, K. (2009). *Kengo Kuma recent project*, Tokyo: A.D.A EDITA Tokyo.)

# CHAPTER 1

## INTRODUCTION

1.1 Research Background

1.2 Research Objectives

1.3 Research Methodology

*“Architecture acts as a gentle buffer between the fragility of  
human existence and the vast world outside.”*

*– Kengo Kuma, Natural Architecture*

## 1.1 Research Background

The essence of architecture is a highly controversial topic and differs depending on the place and time. In the western context, architecture has been defined as a monumental structure since ancient time.<sup>1</sup> Temples, palaces, elite residences, administrative complexes and political centers have been built as a monument building to express political and cultural power.<sup>2</sup> On the other hand, Japanese architecture is more concerned about architecture's relationship with nature instead of an erected edifice object. This can be claimed as the defining characteristic of Japanese traditional architecture.<sup>3</sup>

Kengo Kuma affirms his understanding of architecture with the latter definition. He has always emphasized on the relationship between building and place, and on his rethinking on the essence of architecture, not in its appearance, but in its existence.<sup>4</sup> He believes that a building should become one with its surroundings. In this dichotomy situation of defining the essence of architecture, Kuma describes architecture that is inclined to monumental architecture as a “tower” and that effectuates as a series of experiences as an “aperture”.<sup>5</sup> He further affirms that his architecture is a kind of “aperture” that enthusiastically connects two points.

---

1. A. Bernard, K. (2008). *Monumental Architecture, Identity and Memory*. In: Proceedings of the Symposium: Bronze Age Architectural Traditions in the East Mediterranean: Diffusion and Diversity. Munich: Weilheim, p. 47-59.

2. Ibid.

3. Baek, J. (2016). *Architecture as the ethics of climate*. 1st ed. London and New York: Routledge, p. 1.

4. Kuma, Kengo & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture] (1st ed.). Ji nan shi: Shan dong chu ban ji tuan, shan dong ren min chu ban she, p. 11.

5. Kuma, K. (2010). *Studies in organic* (3rd ed.). Tokyo: TOTO, p. 48.

According to the Norwegian architectural theorist, Christian Norberg-Schulz (1926-2000), architecture provides an existential foothold, one which provides “orientation” in space and “identification” with the specific character of a place.<sup>6</sup> He emphasizes the importance of the relationship between architecture and the direct human experience. His belief was influenced by the notion of dwelling from the German philosopher, Martin Heidegger (1889 – 1976). Heidegger asserted that “only if we are capable of dwelling, only then can we build”.<sup>7</sup> With Heidegger, Christian Norberg-Schulz elucidates the essence of architecture accordingly:

“The basic act of architecture is therefore to understand the “vocation” of the place. In this way we protect the earth and become ourselves part of comprehensive totality. What is here advocated is not some kind of environmental determinism. We only recognize that man is an integral part of the environment, and that it can only lead to human alienation and environmental disruption if he forgets that, to belong to a place means to have an existential foothold in a concrete everyday sense.” (Norberg-Schulz, 1980)

Schulz emphasized on this phenomenology as being the method to advocate the notion of “return to things” that is against the abstractions and mental construction which according to Heidegger is the result of portraying something as a mere object. For Heidegger, framing a thing as a mere object will lead to the elimination of the

---

6. Christian, N. (1996). In k. Nesbit, *Theorizing A New Agenda for Architecture, An Anthology of Architectural Theory 1965-1995* (1st ed.). New York: Princeton Architectural Press, p. 429.

7. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*. (1st ed.). New York: Harper Perennial, p. 362.



direct experience that one has with the thing. By thingness, Heidegger is talking about the physical and intellectual relationship that exist between humans and the thing.<sup>8</sup>

For Kuma, the ordinary understanding of architecture is that a building is considered an object. It is an independent material object which distinct from its environment. He argues that:

“The public perceives buildings to be objects, and that is also the perception of most architects. When one speaks of a beautiful work of architecture, one generally means the work in question is a beautiful object. By an excellent architect one generally means an architect with the ability to design beautiful object.”<sup>9</sup>

To further illustrate the depiction of architecture as a distinct object, the Italian architectural historian, Manfredo Tafuri (1969-1998) also affirmed the end of architecture as an object standing independently in the city structure. Tafuri, following Walter Benjamin’s theory on the “destruction of aura”, asserted the end of architecture as an “auratic object”, in accordance with the end of the status of art as cult object which led to the mechanical reproduction and the mass production of artwork.<sup>10</sup>

According to Heidegger, framing a thing simply as an object diminished the importance of its being and caused it to become something that is severed and

---

8. Sharr, A. (2010). *Heidegger for architects*. (1st ed.). London: Routledge, p. 29.

9. Kuma, K., (2011). *Architecture Words 2: Anti-Object*. (1st ed.). London: AA Publications, p. 5.

10. Esra Akcan (2002) *Manfredo Tafuri's theory of the architectural avant-garde*, The Journal of Architecture, 7:2, 135-170, DOI: 10.1080/13602360210145088.

something abstract in front of us. It causes the object to be detached from our daily experience, which is what the scientific world perspective propagandizes.

## 1.2 Research Objective

This thesis attempts to contemplate the strategies of Kengo Kuma that effectuates against the objectification of architecture. For Kuma, the existence of architecture has always been a severed, individual and distinct object. The separation has becomes more serious with the dominance of concrete construction in the 20<sup>th</sup> century. This autonomous and singular method became worse with the trend of modernity which was wide spread to the whole world through globalism. Kuma argues that it is the “placelessness” of architecture that has been built with the universal construction technique that result in building to be mass produced and sold simply as a product worldwide. This had led the building to become commercialized.<sup>11</sup>

“What am I intended to do is to overturn this system created in the 20<sup>th</sup> century, and this is also the reason why I am doing architecture design work. Houses are not something for sale and purchase, it is for dwelling, for life. It is not considered as staying in the house if we do not have the means to stay together with the house until the last moment of our life. Not only houses, but also other buildings. The

---

11. Kuma, K. & You, N. (2015). *benpao de fujianzhujia*. [Running Architect] (1st ed.). Taibei Shi: Shangzhou Chuban, p. 82.

relationship with the environment should be very concrete and not moveable, something that cannot be given away so easily. It is in close relationship with the life of the people who are staying there.”<sup>12</sup>

From the statement above, it can be seen that Kuma intention is to create architecture that respects human experience and its relationship with the natural environment. This is the source for his notion of “Anti-Object.”

This thesis adopts the reference of the phenomenology of thingness by Martin Heidegger. Heidegger criticized the object and talks about the importance of rehabilitating the relationship between human, thing, and the natural world. This thesis focuses on Kengo Kuma strategies of the anti-object in attempts to revamp the relationship between the vast natures, architecture and human beings. It further studies the feasibility of implementing the strategies of the anti-object that confronts with the multifarious ethic, cultural and natural environment.

### **1.3 Research Methodology**

The thesis will begin by focusing on the background of Kengo Kuma’s architecture of anti-object. The literature review focuses on his view on modern architecture and the dominance of material in building construction which led to the objectification of architecture. He argues that the Keynesian Policy adopted by United

---

12. Kuma, K. (2010). *Fan zao xing*. [Anti Object] (1st ed.). Guilin Shi: Guangxi shi Fandaxue Chuban She., p. 24.

States on rebuilding the nation is one of the reasons that caused buildings to become commercialized which led to the rise of modernism.

This will be followed by the discussion on the influence of Bruno Taut on the development of Kuma's notion of anti-object. Taut argues that architecture should always relate the self to the world instead of being an isolated beautiful object.<sup>13</sup> The discussion will include the case studies of Hyuga Villa built by Taut during his visit to Japan on 1933, which has been a huge influence on Kuma to the development of his theory of anti-object.

The strategies of Kuma's anti-object had been oscillated between the total elimination of the massiveness of architecture as a distinct object and reducing the massiveness of architecture through materiality per se. A thorough analysis will be conducted on this strategies together with the selected case studies of Kuma's work from 1990 to 2000. Kuma claims that his design formula had become more matured after the project of Ando Hiroshige Museum of Art (2000).<sup>14</sup>

The introduction on Martin Heidegger's notion of thing will be carried from the beginning of the thesis in reference to the discussion of Kengo Kuma's idea of anti-object. The reference of Martin Heidegger will be mainly based on the texts: "The Origin of the Work of Art" (1935), "The Thing" (1950), and "Building Dwelling

---

13. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. (1st ed.). London: AA Publications, p. 5.

14. Kuma, K., and Yukio, F. (2009). *Kengo Kuma Recent Project*. 1st ed. Tokyo: A.D.A. Edita, p. 114.

Thinking” (1951).

The final part of the thesis will be an open discussion on the feasibility of the strategies of Kuma’s anti-object that are presumed to be capable of reinstating the relationship between architecture and human beings, where the latter including the vast natural environment of multiple ethics and cultures. By adopting the Heidegger’s phenomenology of thingness it advocates the notion of “return[ing] to thing[s]”.

## **CHAPTER 2**

### **Object, Anti-Object and Thing**

#### 2.1 Introduction

#### 2.2 Kengo Kuma's Notion of Anti-Object

##### 2.2.1 Background

##### 2.2.2 The Commercialization of Housing Complexes

##### 2.2.3 The Dominance of the Building Material

##### 2.2.4 Influenced of Bruno Taut

#### 2.3 Martin Heidegger's Notion of "Thing"

## 2.1 Introduction

Martin Heidegger argues that the distinction between the subject and the object has predominance in Western thought. This is the problem of the traditional epistemology in the relation of subject to the external world.<sup>15</sup> The primary relationship of human to the world was made known after the writing of the Cartesian thesis. Heidegger challenges this notion and asserts that the human experience should not be neglected. The framing of a distinct object from a separated subject creates a dichotomy which the system of scientific research method propagandizes.

The scientific research method which subjects an object to a system was opposed the direct human experience of the environment. The results from the scientific research tended to focus more on the system themselves rather than on the things that are being researched or investigated. Take the example from Adam Sharr which explores a forest by striking out according to a compass bearing.<sup>16</sup> The compass does not understand how people engage with the forest intuitively, and the people themselves do not have the attempt in trying to understand the forest through their own experiences, whereby they just rely purely on the artificial instrument. “To Heidegger, exploring by walking a forest path which was already there instead allowed the territory itself to guide exploration.”<sup>17</sup>

---

15. A. Kadir, C. (1998). *Heidegger's Reading of Descartes' Dualism: The Relation of Subject and Object*. In: 20th World Congress of Philosophy. [online] Boston: Paideia. Available at: <https://www.bu.edu/wcp/index.html> [Accessed 19 Jun. 2017].

16. Sharr, A. (2010). *Heidegger for architects*, p. 85.

17. Ibid.

Heidegger asserts that the existentialism of ourselves unify as oneness within our own. The analysis of the existentialism is not through rational thinking, but through human activity. Heidegger's lifelong philosophical pursuit was directed towards "being".<sup>18</sup>

Heidegger's thinking was indebted to his disclosure on Lao Tse's thought, one of the greatest Eastern philosophers.<sup>19</sup> According to Lao Tse, oneness showed that black and white were indistinguishable from each other. These two colors cannot exist without the absence of either one, the same principle holds true when it comes to the activity of analysis. As Adam Sharr wrote:

"Thinking is always already there, around and within the people who are trying to make sense. In this scheme, separation is an alien idea. [...] Separation is unwelcome because it allows people to feel an artificial superiority over the world and over other humans, perhaps encouraging them towards inappropriate attempts at control."<sup>20</sup>

Therefore, the thinking which result in the objectification of the thing will cause the individual to be merely a detached observer. As illustrated by Manfredo Tafuri, the end of architecture as an object standing individually in urban structure, with the death of the architect as the individual creator, the total dissolution of

---

18. Zhang, Z. Wei (2012). *The Philosophy of Heidegger*.

19. Sharr, A. (2010). *Heidegger for architects*, p. 86.

20. Ibid.



architecture into something other than itself, of aura into mass, of form into process, of author into producer, of architect into organizer.<sup>21</sup>

## **2.2 Kengo Kuma's Notion of Anti-Object**

### **2.1.1 Background**

With reference to Martin Heidegger's argument on the predominant of Western Thought of depicting the thing as distinct object, the same circumstance can be observed in architecture as well. Kengo Kuma asserted that the conventional way of understanding of architecture used to be to understand it as an independent object which is distinctive from its surrounding environment. Both the general public and the architects would depict a work as a beautiful object if they encountered with a beautiful architecture.<sup>22</sup>

Buildings have always been severed from their surroundings, and always have been designed to differentiate themselves from the environment. It is the fate of a building to stand out from the surroundings as an edifice object. However, Kuma holds an opposite view to this contemporary notion of architecture. "Can't this so-called fate be changed? How can I connect this stand out new space with its surrounding? Can't it be merge with the surrounding? Can't it be an oneness or a

---

21. Esra Akcan (2002) *Manfredo Tafuri's theory of the architectural avant-garde*.

22. Kuma, K. (2008). *Anti-object*. 1st ed. London: AA Publications, p. 5.

totality with the surrounding?”<sup>23</sup>

Kuma argues that architecture of the 20<sup>th</sup> century did not try to overturn this notion but instead intensified it to increase the gap of differentiation between buildings and their surroundings. His enthusiasm on the affinity between architecture and the surroundings resulted in his sharp critique on the way the modern architecture deals with the environment. According to Kuma, modernism emphasizes on the method of “separation”. Through this separation, one can create a sharp distinctive object. The typical representation of this method is Le Corbusier (1887-1965), with the utilization of *pilotis* which allows the building mass to be raised above ground, separating it from the earth, letting it stand out among the environment. This approach caused the separation of the building and the environment and established them as two separated objects.

“[...] by raising the building off the ground on slender columns as in his masterpiece, the *Villa Savoye*, he created a gleaming white sculptural object completely separate from its surroundings.”<sup>24</sup>

Besides Corbusier, the other avant-garde 20<sup>th</sup> century modernist German architect Ludwig Mies van der Rohe (1886-1969) was criticized by Kuma as well for his architecture for being a distinctive object severed from the surrounding. Instead of using the *pilotis* to elevate the building from ground, Mies made the entire building

---

23. Kuma, K. (2010). *Fan zao xing*. [Anti Object], p. 11.

24. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p. 23.

rest on a plinth of travertine, as exemplified by the Barcelona Pavilion for the 1929 International Exposition in Barcelona, Spain.<sup>25</sup>

Kuma further argues that the technique of architecture constructed based on the plinth has been dominating the European traditional architecture. The Greek Temple, for example, the goddesses and the laymen are separated by two layers of plinths. The manmade stone plinth and the natural flat base is where the temple sits on against a small hill.<sup>26</sup>

The China Center Television (CCTV) Building in Beijing by Rem Koolhaas is among the most distinctive “object” that is severed from the ground, as argued by Kuma in comparison to Corbusier and Mies. The building is not only distinct and separate from the surroundings but it twists and transforms in form in the mid-air, becoming an extrusive representative object.<sup>27</sup>

The overwhelming form of the CCTV Building in Beijing was criticized by the local citizens. As quoted from a report in The New York Times titled “Koolhaas, Delirious in Beijing” (2011): “And then there’s something about the building’s appearance that seems to unsettle people. Just when things got back on track after the fire, [fire nearby the building which designed by Rem Koolhaas as well] a Chinese critic published an article saying that the building’s contorted form, which frames an

---

25. Kuma, K. (2010). *Fan zao xing*. [Anti Object], p. 12.

26. Ibid.

27. Kuma, K. (2010). *Fan zao xing*. [Anti Object], p. 13.

enormous void at its center, was modeled on a pornographic image of a naked woman on her hands and knees. The piece ignited a storm of negative press, forcing Mr. Koolhaas to issue a denial.”<sup>28</sup>



**Figure 2-1** From the left: Le Corbusier’s Villa Savoye (1931), Mies van der Rohe’s Barcelona Pavilion (1929) and Rem Koolhaas’s CCTV Building (2012). (source from the left: Le Corbusier Foundation, *Fundacio Mies van der Rohe*, OMA)

### **2.1.2 The Commercialization of Housing Complexes**

Kuma asserted that the method used by Corbusier with the utilization of *pilotis* to raise the building and separate it from the ground is a method that could be applied to any part of the world. The separation from the place is the key element that makes this method universal. As a result, the building can be mass produced and sold as a product worldwide. This has led the building to the notion of commercialization.<sup>29</sup>

Buildings became commercialized in the 20<sup>th</sup> century after World War II, when the government of United States adopted the Keynesian policy on rebuilding

---

28. Ouroussoff, N. (2011). *Koolhaas’s CCTV Building Fits Beijing as City of the Future* - Review. [online] Nytimes.com. Available at: <http://www.nytimes.com/> [Accessed 8 Jun. 2017].

29. Kuma, K. (2015). *ben pao de fu jian zhu jia*. [Running Architect], p.82.

the country's economy.<sup>30</sup> John Maynard Keynes (1883–1946), one of the most influential economists in the 20<sup>th</sup> century, initiated the revolution in economic thinking and confronted the neoclassical economics. He believed that the free market system could automatically provide full employment in the short to medium term, provided that the workers were able to work in their wage demands. In 1934, the United States established the Federal Housing Administration (FHA) which is a mortgage system to provide loan to encourage the citizens to build their own homes to solve the problem of housing shortage and at the same time indirectly bring economic growth.<sup>31</sup>

The commercialization of housing caused the involvement of many third parties and stakeholders such as furniture makers, interior designers, electronic appliances producers, transportation providers and etc. Housing as a commercial product also caused the involvement of advertising agencies in the sales and purchasing processes. As a front line to coordinate with the buyer, the advertising agency created posters, booklets, or any kind of media to promote the product. Consequently, the advertising agency became professionals in the building industry due to their close nature with the maturing market growth. The market ranged from housings to office buildings, commercial buildings, and the architect was appointed

---

30. Kuma, K. (2008). *Fu Jian Zu*. [Defeated Architecture] 1st ed. Ji Nan: Shan Dong Ren Min Chu Ban Se, p. 21.

31. Jason Hackworth (2005) *Progressive Activism in a Neoliberal Context: the Case of Efforts to Retain Public Housing in the United States*, Studies in Political Economy, 75:1,29-51, DOI: 10.1080/19187033.2005.11675128

to work under the “advertising agency” to design the designated buildings.<sup>32</sup> This was one of the main issues as argued by Martin Heidegger in his *Building Dwelling Thinking*: “residential buildings do indeed provide lodgings; today’s houses may even be well planned, easy to keep, attractively cheap, open to air, light and sun, but – do the houses in themselves hold any guarantee that dwelling occurs in them?”<sup>33</sup>

### **2.1.3 The Dominance of the Building Material**

To further criticize on architecture which is often interpreted as a distinct and separated object, Kuma affirmed that one of the reasons for this was due to the dominance of the “concrete method”. Kuma claims that the 20th century became the era of concrete. Concrete dominates architecture in the world because of its universality. Molds, metals, cements and gravel are considerably low cost materials and are immediately available in most parts of the world. This is how architects achieve the ideal appearance of buildings, cladding with the finishes that one desires to create the appearances that merge nicely with the surroundings. Japan is one of the countries that have welcomed concrete with great enthusiasm.<sup>34</sup>

Kuma criticizes the widely spread of concrete use in Japan, which replaced the traditional wood construction method. It had modified the appearance of the cities and further destroyed the culture of Japan and undermined the spirit of its

---

32. Kuma, K. (2008). *Fu Jian Zu*. [Defeated Architecture], p. 38.

33. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*, p. 348.

34. Alini, L. & Kuma, K. (2007). *Works and Projects Kengo Kuma* (1st ed.). Milan: Electa Architecture, p. 15.

people. The delicate Japanese sensitivities were overwhelmed by the rough and mass concrete buildings. It was in conflict with the natural environment. The attention which merely focuses on conquering and transforming objects has caused the loss of notion of respect to the nature.<sup>35</sup>

The actual construction method using concrete is similar to the computer graphic drawing technique. The drawings are started with the creation of an object i.e., form, followed by the input of 'material' pattern, such as wood, stone, marble and etc. In the actual world, the concrete is shaped accordingly to the form which the designers want and this is followed by a finish. For example, an architect can choose to paste wood patterns on the building to allow it to be integrated with their surroundings or have marble tiles cladded on it to give it noble character. To sum up, the modern day architecture became dominated by the formula "architecture = concrete + finishes".<sup>36</sup>

The arbitrary characteristic of "placelessness" of concrete is the reason why it can dominate and homogenize the construction technique. According to Kuma, "place" is another term for nature. The multiple characteristics of place, the diversity of nature, were demolished by this homogeneous construction technique. Moreover, Kuma also questions the firmness of concrete by studying the essence of "firmness". Concrete transforms from liquid to solid state instantly, and it is irreversible after it

---

35. Alini, L. & Kuma, K. (2007). *Works and Projects Kengo Kuma*, p.16.

36. Kuma, K. & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture], p. 4.

solidifies. The notion of time for concrete is discontinuous and it contradicts with the temporality of wood structure, which can be repaired or replaced from time to time.<sup>37</sup>

The commercialization of housing in the 20th century has caused the people to pursue the “firmness” of housing. As compared to the olden days, a house was a continuity of a family’s descent. It was passed down from one generation to another. The modern capitalism society separated the lineage of the family to and transformed them into small and isolated individual families. Therefore, these uncertain, restless, and insecure individual families are desperately searching for something rigid and firm that can be reliable. The rigidity of the concrete was the solution for them. However, the “firmness” of this concrete object is questionable, not only in terms of its building’s structure, but also in terms of the family’s structure traditions.<sup>38</sup>

It is difficult to identify the damage concrete does simply by its physical outlook. The notion of concrete as a permanent structure from its “firmness” is unpredictable. Not only in terms of its lifespan but due to the impossibility of structure modification concrete buildings is a difficult material to dispose of. In contrast to concrete, wood or paper are more predictable once it is damaged and can be easily replaced or reconstructed. Therefore they can sustain a longer lifespan and can

---

37. Kuma, K. & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture], p.5.

38. Kuma, K. & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture], p.7.



modified and integrating with the life of the user from time to time with ease.<sup>39</sup>

Kuma argues that another problem of concrete is that it causes separation; the separation of appearance and existence.<sup>40</sup> The appearance of a concrete building can be achieved easily through surface finishes; therefore the essence of the existence of the materials is totally neglected. This is true not only in regards of its relationship with the surroundings but also when it comes to human experience, in which it can be considered as a total deception.

For Kuma, the definition of natural material is unclear. Concrete can simply be defined as a type of natural material because it originates from earth. Plastic can be defined as a natural material since the origin of substance is polymeric material of organic compound that is also from the earth. Kuma asserted that natural architecture is not about building a building with only natural materials. The nature of something will be presented once it is connected with the place where it exists. A natural building is a building which creates a pleasant connection with the place. The marriage of a place and a building thus produces a natural building.<sup>41</sup>

The pleasant connection with the place is not only about integrating with the surroundings of the building. This definition is still confined to the idea of appearance. When we capture the architecture as an appearance, we have already pulled away

---

39. Kuma, K. & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture], p.8.

40. Kuma, K. & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture], p.9.

41. Kuma, K. & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture], p.10.

ourselves from the place and are relying solely on our vision and language. The appearance of buildings can be altered by adding some decorations on top of the concrete walls and make it appear to be integrating with the surroundings.<sup>42</sup>

Kuma claims that new materials have to be discovered to regain the spirit of respecting nature. On top of that, he also believes that without an instinctive respect towards nature, there is no hope for humanity survival in the 21<sup>st</sup> century. The replacement for concrete is necessary. The human beings need it both physically and spiritually.

“This was neither a problem of form nor a problem of detail. I was not dealing with the silhouette (i.e. the form) of an object, nor was I designing the object’s details. Instead, I was searching for the way a material ought to be. I was exploring the relationship between material and the human body.”<sup>43</sup>

#### **2.1.4 Influenced of Bruno Taut**

Kengo Kuma’s idea of “anti-object” was inspired heavily by the notion that architecture had to relate itself to the world. This notion came from Bruno Taut, a German architect who migrated to Japan in 1933 due to Nazism which came into power in that year.<sup>44</sup>

---

42. Kuma, K. & Chen, J. (2010). *Zi ran de jian zhu* [Natural Architecture], p.11.

43. Kuma, K. (2010). *Studies in organic* (3rd ed.). Tokyo: TOTO, p. 26.

44. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p.4.

It was a turning point for Kuma when he visited the Hyuga Villa, also known as the Phantom House at Atami, which was also designed by Taut.<sup>45</sup> It was an interior renovation of a hidden space underneath the existing platform of the house without visible exterior design. Taut's main intention was to relate the space to the sea. He designed split-level floors and framed each view to optimal size which could bring not only the view of the sea but also the sound of the waves.

Kuma expressed himself in such a way once he stepped into the house: "I stretched out on a peculiar raised tatami matted area and let the sound of the surf and scent of the sea wash over me. [...] Taut's lines so connected the building to the sea that my body felt at one with the water."<sup>46</sup>

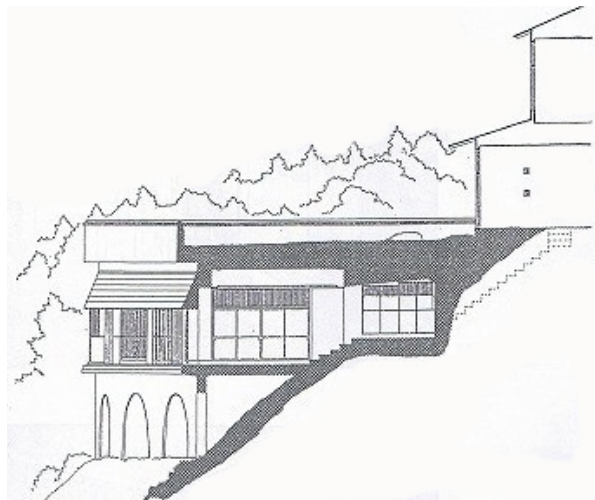


Figure 2-2 Cross-Section of Hyuga Villa. (source from Kuma, K. (2010). *Fan zao xing*. [Anti Object], Guilin Shi: Guangxi shi Fandaxue Chuban She.)

---

45. Ibid.

46. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p. 8.

Bruno Taut criticized modern architecture which emphasized a lot on formalism. Taut argued that the relationship in architecture is more important than the aesthetics. Architecture should act as a medium to connect and ‘relate’ the self with the world—the notion which already existed in the traditional Japanese architecture.<sup>47</sup> Among all the traditional Japanese architecture, Taut was interested mostly in the Katsura Villa in Kyoto which was built during the 17th century.

Taut was amazed by the Villa as it acted as a medium to connect with the surrounding landscape, with sequences and multi layering of experiences that people encountered while walking around the villa. “At Katsura on the contrary [with Nikko], each element remains a free individual, much like a member of a good society in which harmony arises from absence of coercion so that everyone may express himself according to his individual nature.”<sup>48</sup> Taut did not praise the simplicity of form which the Katsura Villa had but he took a critical view of the direction of modern architecture in European, embracing nothing but formalism.

“Beauty may be called ‘eternal’ only when the form—whether in the Gothic Cathedral, the Doric Temple, or in the Ise Shrine and the Palace of Katsura—has fulfilled to its utmost the demands made upon it by the environment and culture of the country: in short, when it is a successful realization of the entirety of things.”<sup>49</sup>

---

47. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p. 5.

48. Taut, B. (1936). *Fundamental of Japanese Architecture*. 1st ed. Tokyo: Kokusai Bunka Shinkokai, p. 20

49. Taut, B. (1936). *Fundamental of Japanese Architecture*, p. 8.



Figure 2-3 Katsura Imperial Villa, Kyoto. (17<sup>th</sup> Century) (courtesy of Kyoto City Web)

## 2.3 Martin Heidegger's Notion of "Thing"

According to Heidegger, things that are depicted as an object will end in the detachment of the direct human experience, occur in a standalone individual distinct object. That is the picture delineating by Kengo Kuma on architecture as a severed object from the surrounding. Heidegger discussed architecture as a "built thing" in his text "Building Dwelling Thinking" (1951). He describe the bridge as a built thing which uphold the dwelling of human being:

"The bridge is a thing – and, indeed, it is such as the gathering of the fourfold [earth and sky, divinities and mortals]..."<sup>50</sup>

The notion of the fourfold is a new term that is used by Heidegger to describe

---

50. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*. p. 355.

the natural world in his philosophy. In the example of the bridge, it clarifies Heidegger view that is against the depiction of thing as an object. When the thing is in its own essence with the characteristic of thingness then it can become the medium to reveal the relationship between human being and the natural world. In other words “the thing” that gathers the fourfold enables the individual to become closer to the world around him or her.

In his text “The Thing” (1950), Heidegger argues the notion of nearness between human being and “the thing” is achieves even with the support of modern technology in this modern era. It seems like we can reach everything in hand by technology, even if it is as far as in the other part of the planet. Heidegger brings up this notion in his beginning of the text to advocate that the nearness of the thing with one individual has nothing to do with the notion of distance:

“What is incalculably far from us in point of distance can be near to us. Short distance is not in itself nearness. Nor is great distance remoteness.”<sup>51</sup>

In the architectural context, for Heidegger, a huge building standing in front of us can be at arm’s length from us if it is interpreted as a mere object, which the dwelling of human does not occur there. Heidegger’s notion of object does not account the physical characteristic such as its massiveness, form, or shape of the thing. The thing will be projected as a distinct object if one starts to analyse its physical

---

51. Heidegger, M. and Hofstadter, A. (1975). *Poetry, Language, Thought translations and introduction* (1st ed.). New York: Harper & Row, p. 165.

outlook, and the characteristic of the thing. In other words, if one started to focus on the properties of the thing Heidegger argued that this unique type of attitude is one of aestheticism.

For Heidegger, architecture is something that acts as a medium that provides the place for the revealing of the relationship between the natural environment and human dwelling on earth. It is like his example of the bridge that connects the people from the two shores, the landscapes, culture, believes, and their relationship with the natural environment. Heidegger describe this what it means to be in oneness of the fourfold, the earth and sky, divinities and mortals.

“To be sure, the bridge is a thing of its own kind; for it gathers the fourfold in such a way that it allows a site for it. But only something that is itself a locale can make space for a site.”<sup>52</sup>

The essence of the thing is gathering. It is not constrained only to the bridge or building but in all the elements. The thingness of the thing is the gathering of the fourfold, which upholds the dwelling of human beings on earth. Furthermore, the essence of the thing only occurs when it is left to rest in its own self, in its thing-being.

This is the reason for Christian Norberg Schulz attempts to “return to the thing” by emphasize on the phenomenological of architecture and says: “Architecture clarifies the location of human existence, which as Heidegger describes it, is between

---

52. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*. p. 355.

the sky and the earth, in front of the divinities.”<sup>53</sup>

Kengo Kuma attempts to create the oneness and totality of architecture with the natural environment that respects the human experience with his notion of anti-object. The study on Kuma’s anti-object will now be preceded further with reference to Heidegger’s notion of thing.

---

53. Christian, N. (1996). In k. Nesbit, *Theorizing A New Agenda for Architecture, An Anthology of Architectural Theory 1965-1995* (1st ed.). New York: Princeton Architectural Press, p. 412-428.



## **CHAPTER 3**

### **Strategies of Anti-Object**

#### 3.1 Introduction

#### 3.2 The Elimination of the Object

##### 3.2.1 The Kiro-san Observatory

##### 3.2.2 The Kitakami Canal Museum

#### 3.3 The Sensuousness of the Material

##### 3.3.1 The Water/Glass House

#### 3.4 Dematerialization

##### 3.4.1 The Stone Museum

##### 3.4.2 The Museum of Hiroshige

##### 3.4.3 Kengo Kuma's Strategy of

Particlizing in the Wider

Perspective

### 3.1 Introduction

Kengo Kuma's idea of anti-object was first thought of in the 1990s and further developed in the following year. His strategies moved between “erasing” and “revealing” in finding the strategies of anti-object.<sup>54</sup> Nevertheless, his intention was to look for the right way to reinstate the relationship between architecture and the natural environment that takes the human experience in to account.

Kuma initially intended to find out the form that was suitable in the context of Tokyo when he first started up his office in 1986. Kuma attempted to achieve fragmentation in the M2 Building in Tokyo. He wanted to create a building that can amalgamate into the cityscape. At first, Kuma used the method of cutting, pasting and remixing of different elements of Tokyo, however he discovered that the city had no form to begin with and the people were not interested in it.<sup>55</sup> Kuma received a lot of negative criticism on the M2 building and this prompted him to rethink on the study of form.



**Figure 3-1 M2 Building, Tokyo, Japan. (courtesy of Kengo Kuma & Associates)**

---

54. Kuma, K. (2010). *Studies in organic*, p.44.

55. Kuma, K. (2010). *Studies in organic*, p.16.

YEAR	PROJECT	LOCATION
1991	Rustic	Shinjuku-ku, Tokyo
	Doric	Minato-ku, Tokyo
	M2 Building	Setagaya, Tokyo
1992	Kinojo Golf Club	Soja, Okayama
	Japan (JR) Museum	Minato-ku, Tokyo
1994	Man-ju	Sawara-ku, Fukuoka
	Yusuhara Visitors' Center	Takaoka-gun, Kochi
	<b>Kiro-san Observatory</b>	<b>Ochi-gun, Ehime</b>
1995	<b>Water/Glass House</b>	<b>Atami, Shinzuoka,</b>
	Space Design of the Venice Biennale Japanese Pavilion	Venice, Italy
1996	Glass/Shadow Golf Club	Tomioka, Miyagi
	Noh Stage in the Forest	Tome-gun, Miyagi
	River/Filter	Tamakawa, Fukushima
	Moving Garden Civic Hall	Nagaoka, Niigata
	Nagaoka Culture Forum	Nagaoka, Niigata
	Kansai-kan National Diet Library	Kyoto
	Grass Net	Milano Triennale, Italy
1997	Eco Particle	Miyako-jima, Okinawa
	Simple Garden Hotel	Le Landes, France
	Reverse Theater	Chofu, Tokyo
	Grass/Glass Tower	Tokyo
	Yonezawa Public University Project	Yonezawa, Yamagata
	Ocean/City	Heng Qin Island, China
	Memorial Park	Takasaki, Gumma
1998	Awaji Service Area	Tsuna-gun, Hyogo
	Water/Slats	Oiso, Kanagawa
	EXPO 2005 Basic Conception	Seto, Aichi
	Seaside Subcenter of Tokyo	Minato-ku, Tokyo
1999	Wood/Slats Guest House	Miura-gun, Kanagawa
	<b>Kitakami Canal Museum</b>	<b>Ishinomaki, Miyagi</b>
	Super Street	Kobe, Hyogo
	Bamboo House	Kanagawa
2000	<b>Museum of Ando Hiroshige</b>	<b>Nasu-gun, Tochigi</b>
	Takayanagi Community Center	Takayanagi, Niigata
	Sakushin Gakuin University	Utsunomiya, Tochigi
	<b>Stone Museum</b>	<b>Nasu-gun, Tochigi</b>
	Bamboo House 2	Nishinomiya, Hyogo
	Institute of Disaster Prevention	Kitasoma-gun, Ibaraki
	Nasu History Museum	Nasu-gun, Tochigi

**Table 3-1 List of Projects by Kengo Kuma from 1990 to 2000.<sup>56</sup>**

56. Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, p. 205.

## 3.2 The Elimination of the Object

The first approach that Kengo Kuma took to follow his idea of anti-object was to literally eliminate the entire object. He intended to eliminate the “massiveness” of a building and instead tried to architecture that disappeared with its surroundings. Quoting Kuma’s words:

“My ultimate aim is to ‘erase’ architecture, because I believe that a building should become one with its surroundings. This is how I have always felt; this is how I will continue to feel. How, then, can architecture be made to disappear?”<sup>57</sup>

### 3.2.1 The Kiro-san Observatory

Kuma came up with this notion of “erasing architecture” when he was designing the Kiro-san Observatory at Ehime Prefecture in 1991. The mayor of Imbari city was looking to build an observatory on a mountaintop that had a view of the beautiful islands of the Inland Sea. Besides functioning as an observatory platform, the mayor was also looking for the observatory to be the symbol of the town. As Kuma stood on the top of the mountain he felt it would be committing a terrible crime to put a solid form on top of its summit which was surrounded by a pristine forest.

---

57. Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, p.14.

A typical observatory platform is usually a distinctive object that stands out from its environment and intrudes the beauty of the surrounding scenery. This project was Kuma's first attempt to "erase" his architecture which was his approach of achieving "anti-object".



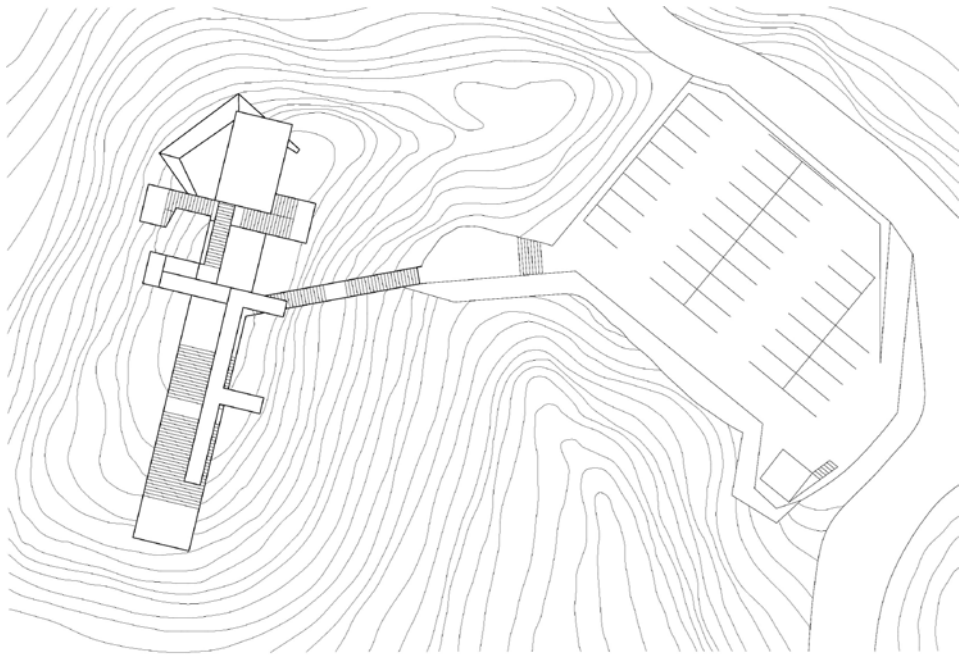
Figure 3-2 Kiro-san Observatory. (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 43.)

Kuma chose to design an observatory that was transparent, invisible and formless which devoid of itself. Instead of creating an object on top of the mountain, it is an architecture achieved by drawing from the subject (the mountain) to choreograph a sequence of movements.<sup>58</sup>

---

58. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p.56.

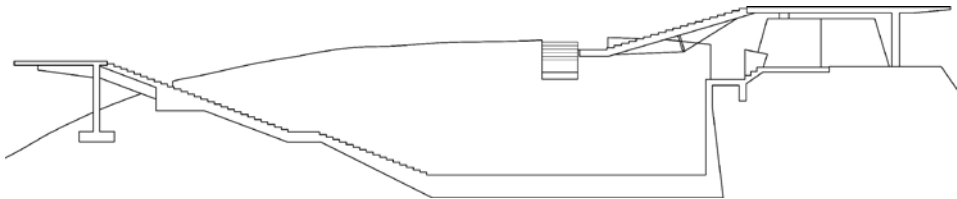
The proposed idea of the invisible observatory was to pile up soil on top of the originally flattened earth, replant all the trees and restore to the mountain original state. A slit or aperture functioned as a viewing deck to the islands of the Inland Sea and the observatory's architecture was to “disappear” into its surrounding.



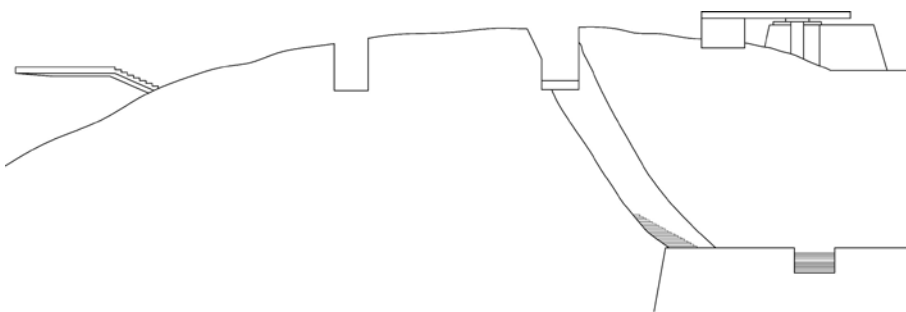
**Figure 3-3 Site Plan of Kiro-san Observatory.** (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 44.)

In terms of circulation the visitor first arrive by entering the sunken passageway that has a ceiling view of blue sky which is framed by a rectangular top opening. Visitor than arrive at a long flight of steps that lead them to the top viewing deck. They will then be met with a sweet surprise as they arrive on an open space that overlooks the glittering sea of islands.

The steps that lead the people to the top deck can also be used as an amphitheater that can seat around 200 people. The steps can also be used as a civic hall or cultural facility for the small town that has only around 8000 people in population. According to Kuma, the grand staircase that is like an ancient Greek amphitheater in section leans on the hill almost as if it's part of the mountain. This is in contrast with the Roman amphitheaters which are built as freestanding structures and separated objects.



**Figure 3-4 Cross Section of Kiro-san Observatory.** (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 45.)



**Figure 3-5 East Elevation of Kiro-san Observatory.** (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 45.)

The form of the Kiro-san Observatory was successfully eliminated and the function of viewing deck to the Inland sea enabled through the slit or “aperture” as described by Kuma. The aperture is the medium that allows the visitors to relate themselves to the natural environment. The observatory is almost totally buried under the earth with the exception of the two protruding viewing decks. However, the solution of burying a building into the earth and visually eliminating it is questionable.

### 3.2.2 The Kitakami Canal Museum

Other than the Kiro-san Observatory the Kitakami Canal Museum which located at Ishinomaki, Miyagi Prefecture, completed in 1999 is another project where its architecture vanishes into its surrounding. During the great Tohoku earthquake Tsunami in 2011, 60% of the Ishinomaki town was destroyed, but the Kitakami Canal Museum survived from the disaster.<sup>59</sup> Kuma claims that it was the building’s design approach of preserving and respecting nature that saved it.



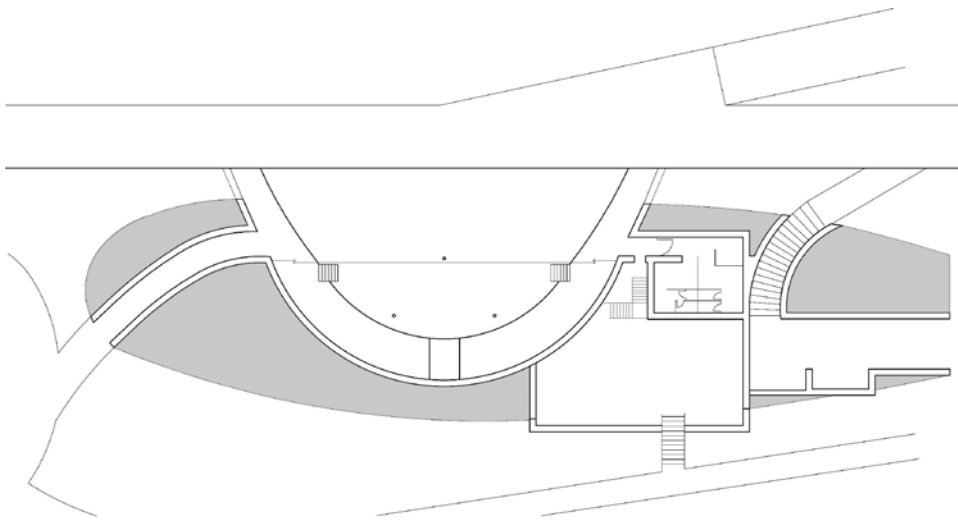
**Figure 3-6 Entrance of Kitakami Canal Museum (source from Bognár, B. & Kuma, K. (2005), *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 76.)**

---

59. Kengo, K. (2016). *Kengo Kuma / Woven*. Lecture, Jaroslav Fragner Gallery.



Kitakami canal is one of the oldest canals in Japan. The museum located at the intersection of the Kitakami canal and river, functions as a small gallery and a recreation area. In regards to the building's awareness of the existing topography and embankment, the structure is embedded into the surrounding park which allows the bicycle and pedestrian walk ways to continue on top of the museum.



**Figure 3-7 Floor plan of Kitakami Canal Museum.** (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 77.)

A third of the building is exposed to the surrounding and is an open plaza in front of the canal. Kuma intended to frame the view of the serene landscape that is beyond the canal from the building's canopy made of thin stainless-steel tube louvers. It features a small lobby and some other service facilities. The surroundings and the architecture of the building merge together to become physically and visually connected entities.



**Figure 3-8** View of Kitakami Canal Museum from the canal. (Source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 78.)

For Kuma, the term ‘erasing’ does not merely mean literally making architecture of a building to “vanish” from the earth. It instead means to achieve a physical and spiritual oneness between a building’s architecture and its surroundings. It is about the building’s relationship with the surrounding. Throughout the years, Kuma slowly moved on from the notion of “erasing” architecture by burying the object into the ground to instead finding ways to dissolve the object into the surrounding through the careful choice of building materials.

Kengo Kuma is not the only architect who tried to “erase” architecture. Dominique Perrault, the French architect also tried to connect the existing architecture with the surroundings by using ground as a building material.<sup>60</sup> Instead

---

60. Perrault, D. (2017). *Groundscape Stories*.

of merely trying to connect it with the infrastructure he also connected the ground with the surrounding's history, culture and existing architecture. To illustrate, Ewha Woman's University campus center at Seoul, South Korea which was completed in 2008, is "buried" underground by a huge open staircase in the middle, with the campus landscape covering the top of the building. This allows the connection and blurring the boundary of new and old, building and landscape, present and past.

"It is this flexibility (conceptual and real) which permits the new Ewha campus center to inevitably weave itself into the landscape - sometimes a building, sometimes a landscape, sometimes a sculpture."<sup>61</sup>



**Figure 3-9 Ewha Woman's University Campus Centre. (courtesy of Dominique Perrault Architecture)**

---

61. Arcspace.com. (2017). *Ewha Woman's University in Seoul by Dominique Perrault*. [online] Available at: <http://www.arcspace.com/features/dominique-perrault/ewha-womans-university/> [Accessed 15 May 2017].

### 3.3 The Sensuousness of the Material

Kengo Kuma became more experimental in the use of materials and construction techniques after making his criticism on the dominance of concrete in the 20th century. He research thoroughly on the characteristics of the materials and uses it to achieve transparency and translucency in architecture to “erase” the massiveness of an object.

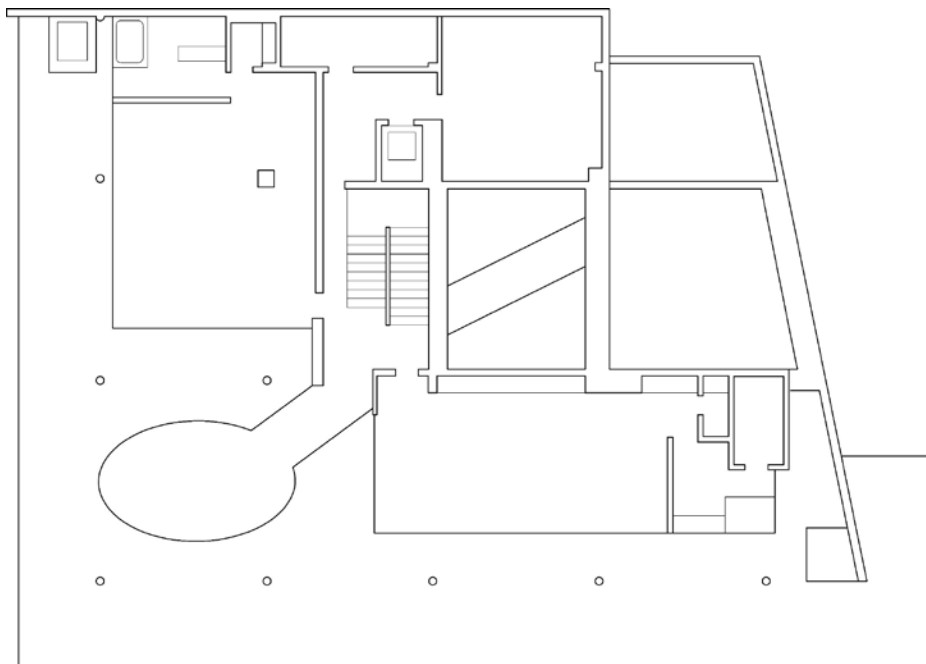
#### 3.3.1 The Water/Glass House

The Water/Glass House located at Atami on a site right next to the Hyuga Villa designed by Bruno Taut. Kuma was inspired a lot by Taut to achieve an “oneness” in a building’s architecture by bringing the ocean into the house. Kuma attempted to do the same by creating a water deck stretching out to the Pacific Ocean.



Figure 3-10 Water/Glass House, Atami. (1995) (courtesy of Kengo Kuma & Associates)

The water deck and the aluminum louvered glass roof are the two horizontal elements which Kuma utilized to allow an immediate connection to the surroundings. The vertical elements are “eliminated” in the house such as the walls by making them with glass. In contrast with the Kiro-san Observatory, Kuma “erased” the Water/Glass House by creating a visual continuity of space. After the completion of the Water/Glass House in 1995, Kuma asserted that he now began to understand the real significance of “erasing architecture”.<sup>62</sup>



**Figure 3-11 Floorplan of Water/Glass House, Atami. (1995) (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 50.)**

---

62. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p. 11.

Kuma excessive response to the vertical objects is partly due to his childhood upbringing.<sup>63</sup> He grew up in a coastal town and was always attracted to the sea which stretches off into the horizon. In the sea the water stays on the horizontal axis and so it bothered Kuma to see a protruding element in the vicinity. He was even bothered by the sea cliffs. Therefore, in order to make the Glass/Water House disappear as much as possible he fully utilized the nature of the water and glass to create a transparent superstructure. Kuma describes that the water deck was now able to get full attention by eliminating the vertical element:

“Erasing the verticals draws attention to the waterly ‘floor’ and the ceaseless motions across its surface – larger movements causing waves, breezes inducing ripples, ever-changing light reflections, which surely no one would tire of looking out onto.”<sup>64</sup>



**Figure 3-12** Water/Glass House, Atami. (1995) (Source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 48.)

---

63. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p. 9.

64. Ibid p. 10.

### 3.4 Dematerialization

Kengo Kuma then further developed his sensitivity of materials and moved on to dematerialization. This is a method of reducing the massiveness of a building as an edifice object. Kuma breaks down the material to smaller pieces with multi porous filters for light, wind, and sound to penetrate into his building. In his words, it is a method that's called "particlizing". This is another approach Kuma used to achieve his notion of anti-object. It is an approach that is about particlizing the architecture of a building to smaller elements.

Kuma intended to achieve a relationship between a building's architecture and the external world through smaller particles. He believes that the relationship between architecture and the environment can be reinstated through the breaking down not only the building materials and the natural elements as well into smaller particles. It can act as a medium to mediate and allow light, wind, and sound to penetrate freely.<sup>65</sup>

The first project which Kuma applied his notion of particlizing was the Water/Glass House in Atami (1995). As discussed previously, Kuma intended to merge the vast expanse of the sea visually and bring it in closer to the viewer by eliminating the vertical element through the use of the glass wall. He further expressed this effect by placing the reflecting pool underneath the glass floor and a

---

65. Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, p.16.

glass roof above, both which are horizontal elements. To further emphasize the translucent effect Kuma fully utilizes the natural resources, i.e. sun light to create a translucent ambience. The stainless steel louvers function as a breaking device to break up the sunlight into smaller particles to make the water surface sparkle.

“My own interest in creating particulate architecture stems from my Water/Glass project and experiencing the sea as particles. Even since then, I have used louvres as part of my vocabulary, to connect people to nature.”<sup>66</sup>

The Museum of Hiroshige and Stone Museum were turning point projects for Kuma’s career life when it came to using the idea of “particlizing”. As Thomas Daniell said: “His design formula is by now well established: select a single material, shape it into smaller module, and then multiply that to produce the entire building.”<sup>67</sup>



**Figure 3-13** Stainless Steel Louvers of the Water/Glass House (1995) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 54.)

---

66. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p.11.

67. Kuma, K., Daniell, T. and Weaver, T. (2015). *Small Architecture*. (1st ed.). London: AA Publications, p. 4.



### 3.4.1 The Stone Museum

Kuma did not limit himself to stainless steel to achieve the “louvers effect” in buildings. The Stone Museum in Nasu, Tochigi prefecture (2000), is a project in which Kuma uses the local stone provided by the client to create the mentioned particulate effect. The Stone Museum is an extension project where three existing traditional Japanese storehouses were restored with the use of the local Ashino stone. Initially Kuma was reluctant to accept the project as he thought stone was too heavy as a material. He believed it possessed the same bulkiness as concrete walls. However, he later thought of dealing with the stone by getting back to its essence. He asked: could we claim the immediacy of stone yet introduce a contemporary heir?<sup>68</sup>

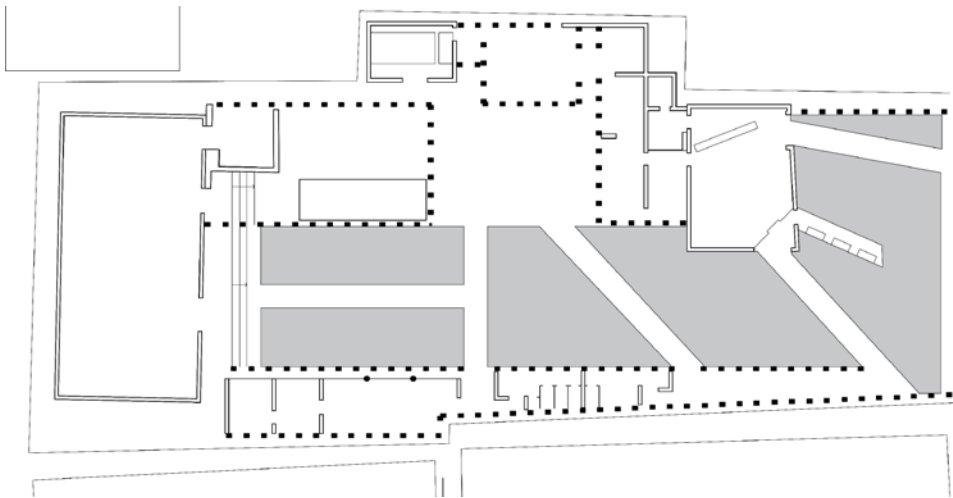


Figure 3-14 Floorplan of Stone Museum (2000) (redrawn by author based on Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 83.)

---

68. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p.18.

Kuma asserted that designers have to dissociate themselves from the subdivision of structures and materials in order to bring back the essences of the materials themselves.<sup>69</sup> He explained that a building structure was already in its finishes. He breaks down the heavy stones into smaller particles which are used as the museum's structure.

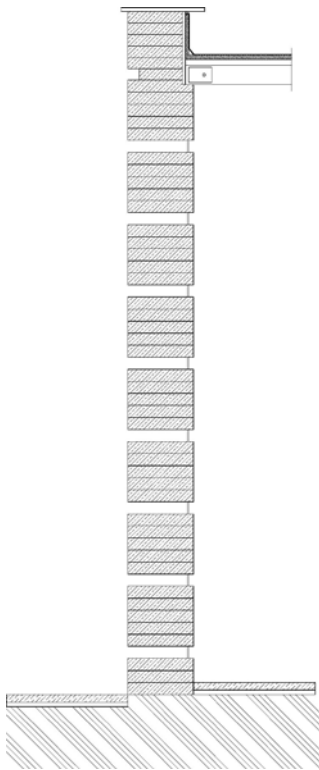
The strength of the structure of the museum was not affected although openings were made in the stone structure. The subtle small openings allow light penetration and fresh air to flow in. This reduces the energy consumption needed in cooling down the building. Kuma then experimented the lattice motives for the stone to achieve a lighter effect for the structure. After 1:1 mock up experiments, he came up with the solution of using 1.5m stone bars, each with 3cm x 15cm in cross-section dimensions made which were made into a grid that is unsupported by steel-backings.



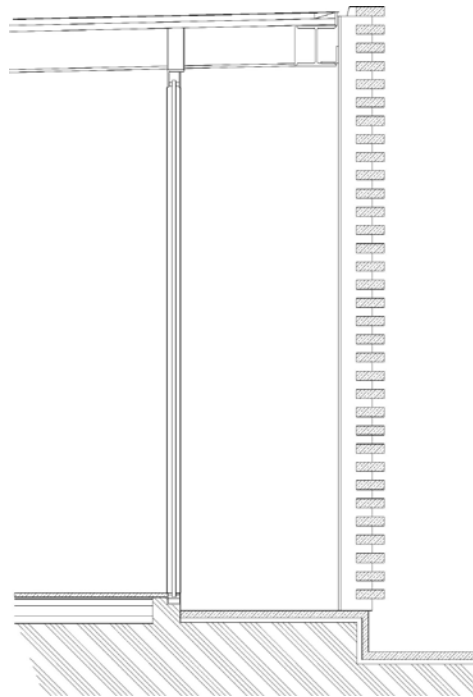
**Figure 3-15** View of courtyard from main gallery, Stone Museum (2000) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 86.)

---

69. Alini, L. & Kuma, K. (2007). *Works and Projects*, p. 18



**Figure 3-16** Detail section of the stone wall.  
(redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 28.)



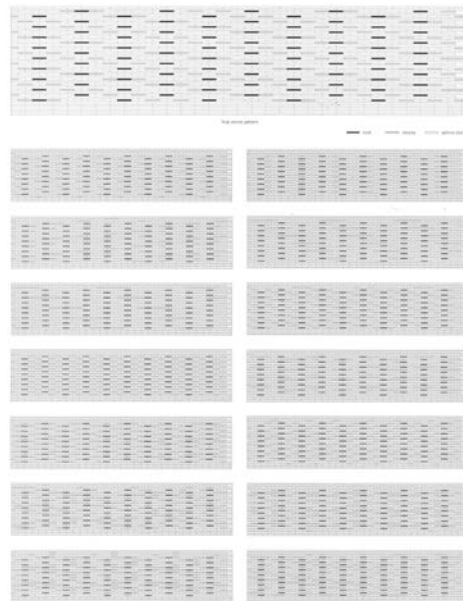
**Figure 3-17** Detail of the cut stone louvers.  
(redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 20.)

Kuma believes that doing real scale mock ups with the materials on site is the only way to know whether the materials are suitable or not. He makes the criticism that nowadays people always rely on 3D wireframe software programs to understand the quality of the materials. In fact, even the most advanced simulation technologies cannot identify the real qualities of materials. He further criticizes that the design process of today totally neglects the essences of materials. Many simply work through the site plan, floor plans, elevations, structural calculations, air conditioning, water

and sewage mechanical systems and only then hurriedly decide on the finishes of the building.<sup>70</sup>



**Figure 3-18** View from the street to the Stone Museum (2000) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 84.)



**Figure 3-19** Studies of stone patterns. (source from Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 25.)

One of the reasons which led Kuma to the philosophy of particlizing was due to his perception of seeing the massiveness and bulkiness of concrete buildings as negative characteristics. However, the differentiation between big and small particles again falls into the notion of dualism or separation. In order to achieve the oneness or the appropriateness of materials, Kuma illustrates this in terms of the

---

70. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p.21.

human body. He believes that the size of a particle is different in every situation or environment. The sensibility of the human body to the size of the particles is a reaction to the relationship between an organism and the environment.<sup>71</sup> For Kuma, an organism survives due to its relationship with other organisms and the environment. He uses the method of breaking apart or connection to come up with the most optimal dimensions in particles.<sup>72</sup>

“The most important aspect of an architecture is not its plan, shape or elevation, but the particles of which it is made up of. If we succeed in designing an appropriate particle, the architecture and environment would blend together.” – (Kengo Kuma, 2010)



Figure 3-20 “A sudden shower over *Ohashi* and *Atake*” by Ando Hiroshige. (source from Forrer, M. (1997). *Hiroshige: prints and drawings*. Munich, New Yor, Prestel: Royal Academy of Arts.)

---

71. Kuma, K. (2010). *Studies in organic*, p.59.

72. Kuma, K. (2010). *Studies in organic*, p.60.

### 3.4.2 The Museum of Hiroshige

In the Museum of Hiroshige (2000), Kuma was inspired by the painting of Ando Hiroshige which he used the straight line to imitate rain in his woodblock ukiyo-e prints. Kuma applied the same technique of particlizing on the museum to eliminate the massiveness of the building by giving the entire building the effect of falling rain through the use of timber louvers.

The Hiroshige Museum of Art (2000) is located at Bato, Nakagawa, Tochigi Prefecture, a town in the north-eastern part of Tokyo. The site is located on a foothill with a cedar forest as the back drop. The local *Yamizo* cedar wood is famous and popular in the country. But then due to the cheap price of imported cedar wood from Canada and America and the imported cedar wood's stronger resilience the number of Japanese cedar decreased in number.



Figure 3-21 Site Plan of Museum of Hiroshige (2000) (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 38.)

The Japanese Government enforced the policy of mass planting Japanese cedar wood after World War II due to its usefulness and speed of growth. This single species replaced all the local multi-species forests and caused an imbalance in the ecosystem. On top of the high demand on imported cedar, the local cedar forest had been abandoned and this was causing heavy soil erosion, reducing the water table and raising the possibility of disastrous landslides.<sup>73</sup>

Kengo Kuma was impressed by an old tobacco warehouse that was built with local but weathered Japanese cedar. It blended in with the cedar-wooded hills that were behind it. Kuma decided to use the local in-situ cedar wood as his point of departure for the design proposal. “Not that we wanted our building to look like a cedar forest, but rather, we wanted it to evoke the atmosphere and light cutting through the woods, of countless tree trunks soaring straight up to the sky, overlapping to create a multi-layered space.”<sup>74</sup>

Besides the cedar forest there was an abandoned traditional Japanese shrine on the hill behind the site. In Japan, shrines are typically located inside forests. Kuma asserts that Japanese shrines are not sanctuaries but act as media or markers of the natural mountain behind them which were considered as the holy of holies.<sup>75</sup> This is because back in the old days the mountain was the source of life for the people. It provided all the basic human needs such as food, water and materials for buildings.

---

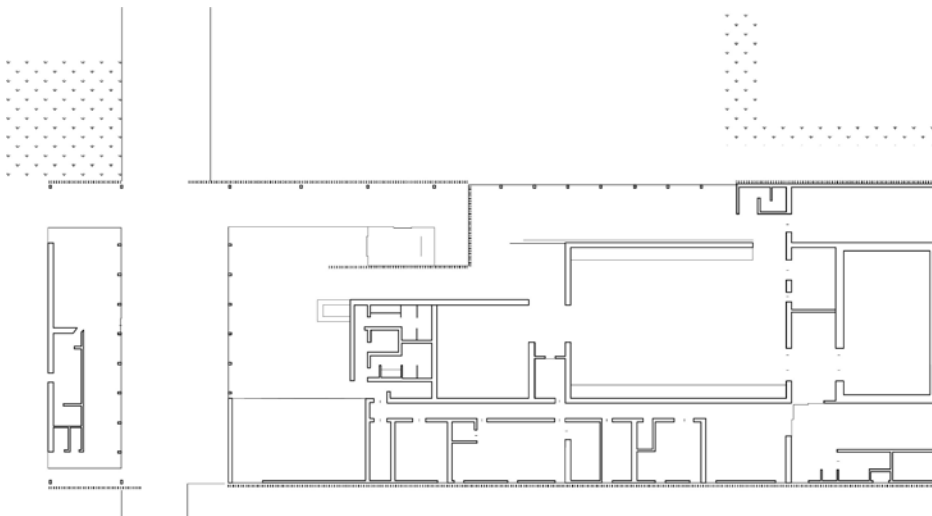
73. STERNGOLD, J. (2017). *Japan's Cedar Forests Are Man-Made Disaster*. [online] Nytimes.com. Available at: <http://www.nytimes.com/> [Accessed 6 Jun. 2017].

74. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p.32.

75. Kengo, K. (2016). *Kengo Kuma / Woven*. Lecture, Jaroslav Fragner Gallery, Prague.

Comparatively, in the modern era, the daily resources for regional towns in Japan instead come from big cities like Tokyo. Over time, people began to abandon shrines in the forests and as a result, the spirit of the mountain was slowly forgotten as well.

Kuma intended to design the museum with the similar mediating presence as a *torii* gate. *Torii* gate is a gate or an entrance to the shrines. The museum functions like a foreground approach gate to accentuate the shrine and function as a marker for the mountain that is behind.<sup>76</sup> To respect the mountain, the building was made low enough to avoid blocking the mountain. The low eaves were designed to be 2.4 meters in height with the overhang of the roof designed to be 3 meters in span. These dimensions were chosen in order to eliminate the massiveness of the wall by creating shadows and to blur the distinction between the inside and the outside of the building.



**Figure 3-22** Floorplan of Museum of Hiroshige (2000) (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 39.)

---

76. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p.39.





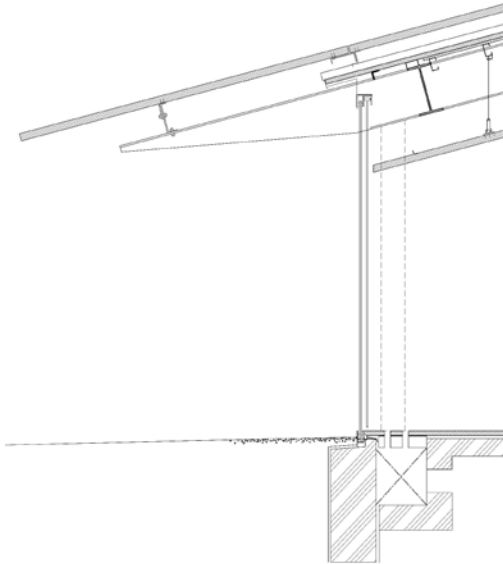
**Figure 3-23** Entrance to the Museum of Hiroshige (2000) (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 92.)

“After passing through the opening to bow towards the shrine and hills, visitors turn right to take in a raked gravel garden and then head into the museum.”<sup>77</sup>

For Kuma, the design of the traditional *torii* gate itself was too ostentatious and distracting. Other than lowering the roof height the roofline itself was designed featureless, low and flat. He did not even allow the triangular gable roof to face the mountain as he thought this would be too striking and would distract one from the beauty of the mountain and shrine. Kuma cuts a large opening in the museum to link the visitor directly toward the mountain, to act as the *torii* gate.

---

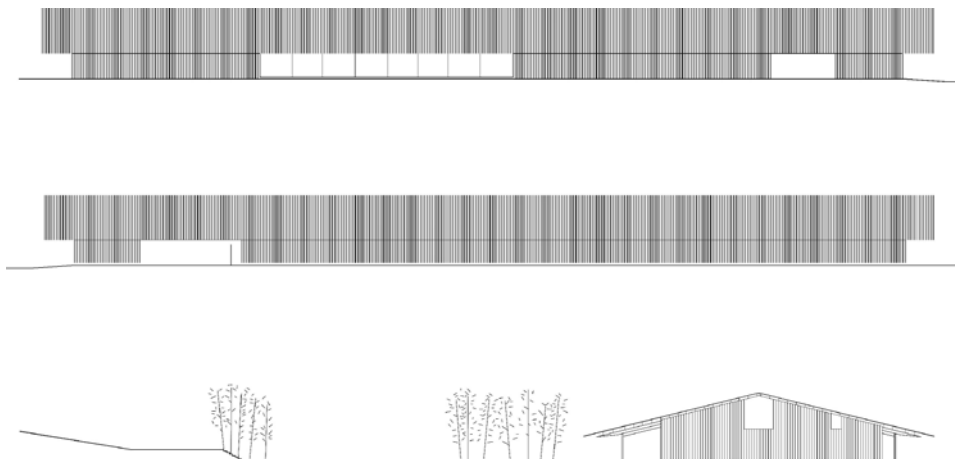
77. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p. 40.



**Figure 3-24** Detail of the overhang roof. (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 43.)



**Figure 3-25** View of North Elevation (source from Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works*, New York: Princeton Architectural Press, p. 94.)



**Figure 3-26** From top: North Elevation, South Elevation and West Elevation of Museum of Hiroshige (2000) (redrawn by author based on Kuma, K. (2004). *Kengo Kuma: Materials, Structures, Details*, Basel: Birkhäuser, p. 38.)

Kuma claims that the Museum of Hiroshige project was a turning point for his career.<sup>78</sup> He not only attempted to break out the wall of the building by creating multiple louvers after the Museum of Hiroshige but he also started to reduce the massiveness of the roof of the building. Besides, the Museum of Hiroshige and Stone Museum both used local materials for their construction and since then Kuma always tried to look for materials that were available on site. He asserted that it was better to obtain materials from the place where the building was going to be built. As what the traditional Japanese carpenter always said, it is best to use the wood from the area where you want to build your house.<sup>79</sup>

Kuma also states that the opening that he creates in the entrance of the museum is a “cave” to connect the two points, just like the bridge illustrated by Martin Heidegger in “Building Dwelling Thinking”. It functions as a medium that connects the people, the cedar forest, the nature, culture and the history.

### **3.4.3 Kengo Kuma’s Strategy of Particlizing in the Wider Perspective**

Kuma does not limit the philosophy of “particlizing” to architecture only. “I do not want to make ‘particlized’ architecture, I want to create a ‘particlized’ condition.”<sup>80</sup> Kuma asserts that “particlizing” is a certain perception of the world or a philosophy. He believes that technology, information, and even human beings

---






78. Kuma, K., and Yukio, F. (2009). *Kengo Kuma Recent Project*, p. 66.

79. Kuma, Kengo & Chen, J. (2010). *Ziran de jianzhu* [Natural Architecture], p.12.

80. Kuma, K. (2004). *Materials, Structures, Details*. 1st ed. Basel: Birkhäuser, p. 14.

should be scattered and “particlized”. The reason that led him to this was the excessive prominence of single systems in architecture, i.e. the method of concrete.

He further argues that by the introduction of hierarchy, structure, or assembly, it allows the people to gain control over the world. The same thing is to happen in sustainability, where one system is applied by the people to control the entire environment. Kuma argues that the abstractness need to suppress the concreteness to achieve the world which can process in a more smoothly way. In a “particlized” world, information system, structure system, traditional and advance technology are all scattered on the same plane and at equal values, without one surpassing the rest. In other words, each element needs to be placed under free conditions.

Projects	Year	Description	Material
The Elimination of the Object			
Kiro-San Observatory 	1991	The first project which Kuma tried to eliminate the whole object from the surrounding.  Used strategies of anti-object to achieve the oneness of architecture by “erasing” the object.	Concrete
Kitakami Canal Museum 	1999	One third of the building was buried underground to achieve the totality of the architecture and the nature.  The museum act as a medium to reinstate the relationship between the people and the river.	Concrete
The Sensuousness of the Material			
Water/Glass House 	1995	Instead of literary “deleting” the object from the surrounding, Kuma achieve the transparency and translucency of architecture by using glass and water.  Influenced by Bruno Taut, Kuma intended to direct the people into the Pacific Ocean by the water deck.	Glass, Water
Dematerialization			
Stone Museum 	2000	Kuma intended to reduce the quantity of the material used to achieve a lighter building effect. The method which he called particlizing was used way to reduce the heaviness of the wall.	Stone
Museum of Hiroshige 	2000	Kuma started to apply the same technique on the roof in the Museum of Hiroshige. Using the local cedar wood from the mountain behind the museum and particlized in to smaller pieces both in the wall and the roof to reduce its heaviness.	Japanese Cedar, Washi paper

**Table 3-2 Selected Case Studies of Kengo Kuma’s works from 1990 to 2000.**

## **CHAPTER 4**

### **Analysis on Kuma's Notion of Anti-Object**

4.1 Introduction

4.2 Architecture as an Identity of a Place

4.3 The Objectification of Building Material

4.4 The Dominant use of a Single Technique

4.5 From Erasing Architecture to Organic  
Architecture

## 4.1 Introduction

Kengo Kuma initial intention on his notion of anti-object was to reinstate the relationship between architecture and the natural environment that puts the human experience as the main concern. He experimented with multiple solutions to solve the problem of the edifice objects. He believed that this “massiveness” problem was destroying the harmonious relationship between architecture and environment. He also asserts that the dominance of the concrete method was causing this destruction as well.

Kengo Kuma illustrates his architecture as being a “cave” or a “bridge” which are terms used by Heidegger. Kuma’s architecture is explicitly about providing a platform or an existential foothold for the gathering of the people, the natural environment, believes, and the culture. This is obvious especially in the Museum of Hiroshige. In Heidegger words, the museum provides a place for the gathering of fourfold. However, from the perspective of the thingness of the thing, people might instead be only attracted to the building itself due to its eccentric arrangement of materials.

There is the danger of the strategies of anti-object falling in to the trap of becoming a single technique, which was the situation that Kuma wanted to initially overcome. The natural environment itself is multifarious and always in a capricious situation. Therefore, a multi porous element to reduce the heaviness of the building is sometime questionable in this vigorous environment.

## 4.1 Architecture as an Identity of a Place

One of the reasons why Kuma initiated to eliminate the object from the surface is due to his view against architecture being a monument. He came across a project which required him to design a memorial to commemorate some 800 people, and he was reluctant to accept the job at first because he was apparently was to design an object made of stone. He further criticizes about monumentality as so:

“Ordinarily, if we want to make something that will endure, we turn to shape of cohesive force, believing it to be the only form that will impress itself on people’s memories. The word monument is derived from the Latin for ‘remind’. The function of a monumental is also to last through time; thus it aspires to be a powerful, conspicuous object.”<sup>81</sup>

However, Kuma initial purpose of anti-object is to reinstate the relationship of architecture with the environment with respect to the human experience. According to Heidegger, the initiative of human experiences on his dwelling on earth with thing does not actually consider the massiveness of the object itself. On the contrary, it is the interpretation of the thing on its form leads to the objectification of the thing.

In contradiction, according to Heidegger, to reinstate the human dwelling on earth is to require building itself to achieve that purpose. It is the building that uphold human dwelling on earth, the essence of building is letting dwelling to occur.<sup>82</sup>

---

81. Kuma, K., (2011). *Architecture Words 2: Anti-Object*, p. 90.

82. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*, p. 361.



Heidegger's way of reinstate the relationship of architecture and human beings with the natural environment is through the appearance of the building which is different from Kuma's initial idea of "erasing architecture". Heidegger reveals this etymologically from the Greek word *tikto*:

"The Greek for 'to bring forth or to produce' is *tikto*. The word *techne*, technique, belongs to the verb's root, *tec*. To the Greeks, *techne* means neither art nor handicraft but, rather, to make something appear, within what is present, as this or that, in this way or that way. The Greeks conceive of *techne*, producing, in terms of letting appear. *Techne* thus conceived has been concealed in the tectonics of architecture since ancient times."<sup>83</sup>

According to Christian Norberg-Schulz, the men dwell on earth by localizing themselves in a space and by being exposed to a certain character of that environment. In other words, it is the "orientation" and "identification" that is concerned.<sup>84</sup> Architecture is the existential foothold that provides men their orientation on that place, and through architecture only then can men identify themselves in that place. This is related to Kevin Lynch's concept of path, landmark, edge, node and district to identify the image of a city.<sup>85</sup>

Schulz further asserted that identification and orientation are primary

---

83. Ibid.

84. Christian, N. (1996). In k. Nesbit, *Theorizing A New Agenda for Architecture*, p. 423.

85. Lynch, K. (1960). *The Image of the City*. 1st ed. Cambridge, Mass: M.I.T. Press, p. 8.

aspects that allow man to have a “being” in the world. To dwell on the earth, man need to concretize the world in buildings and things. “It is therefore not only important that our environment has a spatial structure which facilitates orientation, but that it consists of concrete objects of identification. Human identity presupposes the identity of place.”<sup>86</sup>

In order to discuss architecture being a medium to reinstate its relationship with the natural environment, it is necessary to review Heidegger’s example of Greek Temple in his text “The Origin of Work of Art” (1935). For Heidegger, architecture can act as a medium to revoke the presence of the natural world, by letting the world be in its own pure essence. However, the building itself must present first, before it can presence the world. Quoted his example of the Greek Temple:

“...Standing there, the building rests on the rocky ground. This resting of the work draws up out of the rock the mystery of that rock’s clumsy yet spontaneous support. Standing there, the building holds its ground against the storm raging above it and so first makes the storm itself manifest in its violence. The luster and gleam of the stone, through itself apparently glowing only by the grace of the sun, yet first brings to light the light of the day, the breadth of the sky, the darkness of the night. The temple’s firm towering makes visible the invisible space of air.”<sup>87</sup>

Heidegger mentioned multiple times that the temple is “standing there”, not

---

86. Christian, N. (1996). In k. Nesbit, *Theorizing A New Agenda for Architecture...*, p. 425.

87. Heidegger, M. and Hofstadter, A. (1975). *Poetry, Language, Thought*, p. 167.

anywhere, but it standing “there”, in the middle of the rock-cleft valley. This is to explain that the temples are built in a particular place, and through the temple the identity of the place was evoked. “By means of the building the place gets extension and delimitation, whereby a holy precinct for the god is formed.”

The erasure of architecture from the place may lead to the erasure of the identification of the place as well. Frank H. Weiner criticized that: “The erasure of architecture is the elimination of the category of place and our capacity as architects to represent a consciousness of place.”<sup>88</sup> He further argued that Kuma’s erasure of architecture is an act of digital deletion, camouflage and mirage seeking to hide itself in-situ. Comparing to Frank Lloyd Wright’s Falling water which does not disappear in the surrounding to achieved the oneness with the environment, it instead perches above the river and provides a place for the gathering of the fourfold, just like Heidegger’s bridge does as illustrated in “Building Dwelling Thinking” (1951)



**Figure 4-1 Falling Water by Frank Lloyd Wright. (1935) (courtesy of Frank Lloyd Wright Foundation)**

---

88. Weiner, F.H. (2007). *Architecture as such: refutations and conjectures of quality in the work of Kengo Kuma and W. G. Clark*. *Architectural Research Quarterly*, 11(3-4), pp.245–253.

Heidegger illustrates how architecture acts as a “thing” to bring forth the quality of a place in his example of the bridge that he talks about in his text “Building Dwelling Thinking” (1951), he says:

“To be sure, the bridge is a thing of its own kind; for it gathers the fourfold in such a way that it allows a site for it. But only something that is itself a locale [place] can make space for a site. The locale [place] is not already there before the bridge is. Before the bridge stands, there are of course many spots along the stream that can be occupied by something. Once one of them proves to be a locale [place], and does so because of the bridge. Thus the bridge does not first come to a locale [place] to stand in it; rather, a locale [place] comes into existence only by virtue of the bridge.”<sup>89</sup>

The projection of the thing as an object is one that causes in the building itself stay away from the dwelling of man. Monumentality in architecture can act as a medium to reinstate the dwelling of man on earth if the building has been built to achieve it. The following is a quote from Louis Khan:

“Monumentality in Architecture may be defined as a quality, a spiritual quality inherent in a structure which conveys the feeling of its eternity, that it cannot be added to or changed. We feel that quality in the Parthenon, the recognised architectural symbol of Greek civilization” (Kahn, 1944)

---

89. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*, p. 356.

## 4.2 The Objectification of Building Material

Kuma enthusiastically looked for a new material to replace the domination of concrete. He stated “Together with craftsman, I want to rethink entirely the way materials are treated. Various ready-made details have been stored away or have accumulated in my mind or my mind’s eye, but I want to forget them as much as possible and instead carve and “cook” materials in new, different way.”<sup>90</sup>

Kuma enthusiasm of materials comes from his initiative to particulate the element which he intended to use to bring back the delicate relationship between human being and the environment where architecture acts as the medium. However, focusing too much on the material may lead to a trap of thinking which occupied the Western thought as discussed earlier. We will end up losing the essences of the material. In other words, this in a way objectifies the material as a distinct object which is totally opposite to Kuma’s notion of anti-object.

The objectification of the building material will cause the people to be attracted to the material. To illustrate, one will never notice the existing architectural elements in their daily life such as the roof, wall, and floor because those elements have already become part of their dwelling. Things that being in their characteristic of thingness are always rest in its being, it is already part of the dwelling of human being. Heidegger uses the example of the peasant shoes to illustrate this:

---

90. Kuma, K. (2010). *Studies in organic*, p. 28.

“The peasant women wears her shoes in the field. Only here are they what they are. They are all the more genuinely so, the less the peasant woman thinks about the shoes while she is at work, or looks at them at all, or is even aware of them. She stands and walks in them. That is how shoes actually serve. It is in this process of the use of equipment that we must actually encounter the character of equipment.”<sup>91</sup>

According to the study done on the sensuousness and thingness on Kengo Kuma's Water/Glass House from the perspective of phenomenology by Professor Jin Baek, human beings rarely interpret the material properties of an architectural element.<sup>92</sup> Baek further illustrates that the way people look at an architectural element such as a brick wall is not of fragmentation. People see the brick wall holistically.

The glass floors and glass walls Kuma uses that allowed the building's architecture integrate into the surrounding in his Water/Glass House, unintentionally gave significance to the architecture elements. “The attention to the material properties of an element, rather than what the element performs and actualizes in human dwelling, indicates that one's relationship with his or her surroundings has left the horizon of the everyday life and moved towards the highly reflective and artificial domain called aestheticism.”<sup>93</sup>

---

91. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*, p. 159.

92. Jin Baek (2013) *Between Material Sensuousness and Thingness: the Significance of the Structural Glass in Kengo Kuma's Water/Glass House from the perspective of Phenomenology*, Journal of Asian Architecture and Building Engineering.

93. Ibid.

In other words, the glass floor's reflectivity drew the people's attention due to the quality of the material. Kuma further gets the attention of the people to the material through the use of electric light fixtures together with the particlized sunlight rays that penetrate through the aluminum louvers. However, it is obvious that Kuma's initial intention was to “vanish” the appearance of the house as an object by using the translucent characteristics of glass and water.



**Figure 4-2 Water/Glass House, Atami (1995). (courtesy of Kengo Kuma & Associates)**

The excessive scientific analysis on the properties of the material will trap us in to the dominance of aestheticism. The appearance of the thing which now is depicted as a mere object would be occupied the minds of men. Because of the nature of the materials, the essence of the materials will be lost. This will cause the creator to focus on the creation of the object based on its physical performance.

To further illustrate, Kuma researched thoroughly on the possibilities of wood. He was then inspired by a toy that was made from the mountains of Takayama called the *Chidori*. The toy is made by joining three wood pieces in x-y-z vector which are simultaneously locked by means of an ultra-exact notching system. Compared to the usual two-piece join with x-y vector, this can be used as a wood joint. There is a slight curvature on the inner surfaces of the notches which allows last bar twist into place which locks all three bars in place. Kuma applied this technique for the courtyard of Castello Sforzesco, 2007 in Milano Salone.



**Figure 4-3** *Chidori* Pavilion in 2007 Milano Salone. (courtesy of Kengo Kuma & Associates)

The idea of the *Chidori* was also developed in to a real architecture building, the GC Prostho Museum in Nagoya, completed on 2010. The site is located in an ordinary residential area and this allowed it to be built in respect to the scale of the surrounding timber-frame houses.



Compared to his earlier building in terms of his notion of “erasing architecture”, the GC Prostho Museum is very different in form. Kuma “particlized” the entire building with timber lattice to reduce its massiveness. As discussed earlier, the outstanding structure might objectify the whole building and make it stand out as a distinct object.



Figure 4-4 GC Prostho Museum (2010). (courtesy of Kengo Kuma & Associates)

However, it is no doubt that a work is created and brought forth by its materials. The work requires a setting up, “to bring forth or to produce” as discussed earlier the building need to be appear, and only then can it be in its work. The equipment is set up according to its usefulness and serviceability. For example an ax from Heidegger’s text, it is produce by stone and when the stone is used up its not useful anymore. “The material is all the better and more suitable the less it resists vanishing in the equipmental being of the equipment.”<sup>94</sup>

---

94. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*, p. 171.

Nevertheless, Heidegger asserted that the setting up of the Greek temple did not cause the material to disappear, but rather causes it to come forth for the very first time and to come into the open region of the work's world.

“The rock comes to bear and rest and so first becomes rock; metals come to glitter and shimmer, colors to glow, tones to sing, the word to say. All this comes forth as the work sets itself back into the massiveness and heaviness of stone, into the firmness and pliancy of wood, into the hardness and luster of metal, into the brightening and darkening of color, into the clang of tone, and into the naming power of the word.”<sup>95</sup>

However, the come forth only for the “very first time” as mentioned, and the world only come into the open region by letting the material be in its own essence. Any additional analysis done on the material will lead to the loss of its essence. “Nowhere in the work is there any trace of a work material.”

“To be sure, the sculptor uses stone just as the mason uses it, in his own way. But he does not use it up. That happens in a certain way only where the work miscarries. To be sure, the painter also uses pigment, but in such a way that color is not used up but rather only now comes to shine forth.”<sup>96</sup>

---

95. Ibid.

96. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*, p. 173.

### 4.3 The Dominant use of a Single Technique

Kengo Kuma argues that the relationship between man and nature was destroyed by the construction of the edifice structures, buildings which sever themselves from the surrounding and become distinct objects. In order to overcome this problem Kuma attempted to particulate the building elements and through the layering of louvers the relationship was reinstated. However, it is not always appropriate for a single technique to be used in a vast and multifarious natural environment.

Nature is unpredictable and uncertain in terms its form and longevity. Nature is full of diversity elements that vary in heaviness, sharpness, and shapes. The cliff on the seaside, the hill, mountain, and rock are elements that protrude above the ground. However, Kuma sees them as distinct objects that stand out of the earth unnaturally. Kuma states:

“Even sea cliffs bother me. The vertical thrust of the rocks defying the horizontal water makes me nervous – concrete seawalls doubly so.”<sup>97</sup>

The above statement is in reference to Kuma’s enthusiasm on the horizontal element of the seaside. This is the reason why to Kuma any standing vertical element disturbs him. For Heidegger, the world is the totality of all things, wherein a human being is living. The term “things” that is mentioned is talking about the mundane

---

97. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. p. 9.

objects we see. As Heidegger illustrates, the jug is a thing, and the bridge is also a thing. The relationship between the world and the things are interdependent.

Trying too hard to achieve the notion of anti-object might in a way lead to the objectification of a thing. For example the rock and the cliff themselves are “things” that are on earth and within the domain of human dwelling. The rock was never a distinct object until one started to analyze their physical characteristics and properties.

#### **4.4 From Erasing Architecture to Organic Architecture**

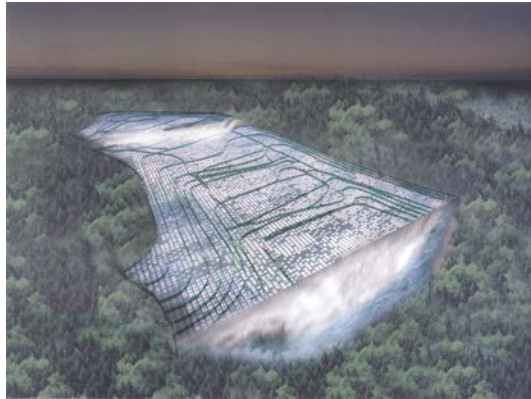
Kengo Kuma’s notion of “erasing” architecture changed throughout the year, especially when he started to do more overseas projects. However he claims that the fundamental idea of “erasing architecture” never changed. Kuma explains that the approach of whether buildings should really disappear into the environment and become invisible was something that started to become reconsidered in the notion of “erasing” architecture.

A turning point for Kuma was when he started to lose in a number of competitions such as in the Nam June Paik Museum in Korea (2003) and the Museum of the History of Polish Jews in 2005.<sup>98</sup> He confessed that the developers would not invest big amount of money to create buildings which is “disappeared”. The

---

98. Kuma, K. (2010). *Studies in organic*, p. 38.

completion of Guggenheim Museum in Bilbao (1998) by Frank Gehry opened a new horizon in architecture which made everyone seek monumental sculptural buildings.



**Figure 4-5 Nam June Paik Museum Competition, Korea (2003).** (source from Kuma, K. (2009). *Kengo Kuma recent project*, Tokyo: A.D.A EDITA Tokyo.)

However, Kuma did not stop trying to “erase” architecture. His notion of anti-object did not change but instead chose to focus more on the method of “particlizing” to achieve the harmonious relationship between architecture and environment.

Kuma came across an opportunity to try to “erase” and “reveal” architecture in his entry for the competition for the Museum of History of Polish Jews Warsaw, Poland in 2005 which was shortlisted. The ground of the site for the construction was slightly higher than the surrounding and Kuma was shocked once he had been told that underneath the site was a Jewish ghetto destroyed by the Nazis in the war.

Kuma wanted to unearth the rubble that had been buried to show the people what had been buried there. This approach was very different compared to the Kiro-

san Observatory. The intention here of trying to “erase” and “reveal” actually fell into a dualistic conceptual framework. Kuma started to think about the way an animal or insect makes its nest or lair. It is made to be invisible or difficult to be reached by predators but made to easily found by those living there. Multiple conditions and parameters would be considered and thus something complex that allows the nest or lair to be concealed and revealed would be made. Animals and insects survive by creating such complex abodes.<sup>99</sup>

“Reexamining the behavior called architectural design from such a perspective, I began to see a continuous series of actions that could not be pigeonholed by the simplistic conceptual framework of dual opposition.”<sup>100</sup>

Kuma’s notion of “erasing architecture” developed from literary “burying” architecture into the ground to making a balance between “erasing” and “revealing”. In other words, it is the relationship between the surroundings and the human beings was more important.

Kuma realized that he unconsciously started to use this architectural thinking after his first encounter the situation of “revealing” or “erasing architecture.” “If the leading role in architecture is played by organisms called human beings, then it seems to me only natural to regard architecture as a matter of relationship, that is, the relationship between organisms and matter on the one hand and the relationship

---

99. Kuma, K. (2010). *Studies in organic*, p.46.

100. Kuma, K. (2010). *Studies in organic*, p.47.

between organisms and the environment on the other.”<sup>101</sup>

However, his enthusiasm in finding new materials to substitute concrete in a way limited the relationship between human being and architecture. For Kuma, the “particlizing” of materials to smaller particle was to eliminate the objectiveness of the architectural elements such as the heavy wall. Heidegger’s solution to this was to put the cart before the horse in a way objectify the elements.

---

101. Kuma, K. (2010). *Studies in organic*, p. 52.

## CHAPTER 5

### CONCLUSION

The strategies of Kengo Kuma's notion of anti-object changed from eliminating the entire object to manifesting architecture. His strategy of "particlizing" the whole building into multiple layers of elements is the solution that he uses. With his sensitivity to the properties and the sensuousness of the materials, Kuma is able to create another atmosphere which allows the building to blend into the environment. His initial aim was to create an architecture that is in oneness and totality with the natural environment.

Kengo Kuma notion of "erasing architecture" initially means more than elimination of the whole object. It also signifies the integration and the totality between architecture with the natural surroundings and the place. As claimed by Kuma in his *"Studies in Organic"*, "the bigger achievement of the 21<sup>st</sup> century view of organism has been the perception that an organism is not autonomous but something that through relationships with the external world". "Particlizing" is in opposition to autonomous construction: a state where one member stands out, controlling and suppressing the rest.

Like what architect Jeanne Gang said, in the modern era, on top of designing buildings, the key role of an architect is to building relationships. An architect



possesses a role of designing media to build relationships between buildings, environment, human beings, cultures, histories, places, and even nations. Heidegger discusses about the relationships between thing and the world where man dwell within it.

Kuma always tries to bring out the qualities of the materials by solving it with different kinds of construction methods to go back to their essences. However, this in a way falls into the trap of objectification of the thing which is asserted by Heidegger on the phenomenology on the thingness of the thing. This will result in a more serious departure on the essence of the thing from their relationship with human beings.

The perception of thinking of architecture as an object had already objectified architecture, instead as a thing in its being. Only thing that be let in its own being-in the world, only than it can reveal the relationship between human being and the natural environment. This is the only way which the direct relationship with human being experiences and the thing can occur.

In conclusion, Kuma's architecture of anti-object achieves its aim of reducing the massiveness of the object which he believes is the main reason which severed the relationship between architecture and environment. However, his enthusiasm on revoking the properties of materials has in away caused the objectification of architecture which leads to the trap of aestheticism.

# BIBLIOGRAPHY

## Book

1. Alini, L. & Kuma, K. (2007). *Works and Projects Kengo Kuma* (1st ed.), Milan: Electa Architecture.
2. Baek, J. (2016). *Architecture as the ethics of climate*. (1st ed.), London and New York: Routledge.
3. Bognár, B. & Kuma, K. (2005). *Kengo Kuma: Selected Works* (1st ed.), New York: Princeton Architectural Press.
4. Christian, N. (1996). In k. Nesbit, *Theorizing A New Agenda for Architecture, An Anthology of Architectural Theory 1965-1995* (1st ed.). New York: Princeton Architectural Press.
5. Frampton, K. (1996). In k. Nesbit, *Theorizing A New Agenda for Architecture, An Anthology of Architectural Theory 1965-1995*, (1st ed.). New York: Princeton Architectural Press.
6. Heidegger, M., Krell, D. and Carman, T. (2008). *Basic writings*. (1st ed.), New York: Harper Perennial.
7. Heidegger, M. and Hofstadter, A. (1975). *Poetry, Language, Thought translations and introduction*. (1st ed.), New York: Harper & Row.
8. Kuma, K., Daniell, T. and Weaver, T. (2015). *Natural Architecture*. (1st ed.), London: AA Publications.
9. Kuma, K., Daniell, T. and Weaver, T. (2015). *Small Architecture*. (1st ed.), London: AA Publications.

10. Kuma, K. (2010). *Studies in organic* (3rd ed.), Tokyo: TOTO.
11. Kuma, K., and Yukio, F. (2009). *Kengo Kuma Recent Project*. (1st ed.), Tokyo: A.D.A. Edita.
12. Kuma, K. and Lee, J. (2007). *Kengo Kuma*. (1st ed.), Seoul: C3 Publishing Co.
13. Kuma, K. and Sypkens, M. (2017). *Layering*. (1st ed.), Canada: Westbank Projects Corp.
14. Kuma, K. (2004). *Kengo Kuma Materials, Structures, Details*. (1st ed.), Basel: Birkhäuser.
15. Kuma, Kengo & Chen, J. (2010). *Ziran de jianzhu* [Natural Architecture] (1st ed.), Jinan shi: Shandong chuban jituan, shandong renmin chubanshe.
16. Kuma, K. & You, N. (2015). *benpao de fujianzhujia*. [Running Architect] (1st ed.), Taibei Shi: Shangzhou Chuban.
17. Kuma, K. & You, N. (2015). *Wo de chang suo* [My Place] (1st ed.), Taibei Shi: Wunan.
18. Kuma, K. (2010). *Fan zao xing*. [Anti Object] (1st ed.), Guilin Shi: Guangxi shi Fandaxue Chuban She.
19. Kuma, K. (2008). *Fu Jian Zu*. [Defeated Architecture] (1st ed.), Jinan: Shandong Renmin Chuban She.
20. Lynch, K. (1960). *The Image of the City*. (1st ed.), Cambridge, Mass: M.I.T. Press.
21. Sharr, A. (2010). *Heidegger for architects*. (1st ed.), London: Routledge.

### Journal Article

1. Esra Akcan (2002) *Manfredo Tafuri's theory of the architectural avant-garde*, The Journal of Architecture, 7:2, 135-170, DOI: 10.1080/13602360210145088.
2. Jason Hackworth (2005) *Progressive Activism in a Neoliberal Context: the Case of Efforts to Retain Public Housing in the United States*, Studies in Political Economy, 75:1,29-51, DOI: 10.1080/19187033.2005.11675128
3. Jin Baek (2010) *Climate, Sustainability And The Space of Ethics*, Architectural Theory Review, 15:3, 377-395, DOI: 10.1080/13264826.2010.497181.
4. Jin Baek (2013) *Between Material Sensuousness and Thingness: the Significance of the Structural Glass in Kengo Kuma's Water/Glass House from the perspective of Phenomenology*, Journal of Asian Architecture and Building Engineering.
5. Weiner, F.H. (2007). *Architecture as such: refutations and conjectures of quality in the work of Kengo Kuma and W. G. Clark*. Architectural Research Quarterly, 11(3-4), pp.245–253.

### Conference Proceedings

1. A. Bernard, K. (2008). *Monumental Architecture, Identity and Memory*. In: Proceedings of the Symposium: Bronze Age Architectural Traditions in the East Mediterranean: Diffusion and Diversity. Munich: Wilhelm
2. A. Kadir, C. (1998). *Heidegger's Reading of Descartes' Dualism: The Relation of Subject and Object*. In: 20th World Congress of Philosophy. [online] Boston:

Paideia. Available at: <https://www.bu.edu/wcp/index.html>

### Lecture

1. Kengo, K. (2016). *Kengo Kuma / Woven*. Lecture, Jaroslav Fragner Gallery.
2. Perrault, D. (2017). Groundscape Stories.
3. Zhang, Z. (2012). The Philosophy of Heidegger.

### Online Resources

1. Arcspace. ([www.arcspace.com](http://www.arcspace.com))
2. Internet Encyclopedia of Philosophy. ([www.iep.utm.edu](http://www.iep.utm.edu))
3. Kengo Kuma & Associates. ([www.kkaa.co.jp](http://www.kkaa.co.jp))
4. New York Times. ([www.nytimes.com](http://www.nytimes.com))

# 국문 초록

## 쿠마 켄고 건축의 반(反) 오브젝트의 관한 연구

-마르틴 하이데거의 물(物)의 이론을 중심으로-

서울대학교 대학원 건축학과 왕 키 윤

지도교수 최 두 남

이 논문은 마틴 하이데거 (Martin Heidegger)의 사상을 바탕으로 켄고 쿠마 (Kengo Kuma)의 반(反) 오브젝트의 건축 연구에 중점을 두고 있다. 쿠마(Kuma)는 현대 건축 양식이 주변 환경과 어떻게 분리되어 지어 지는지에 대해 항상 혼란을 겪었으며, 따라서 스스로를 별개의 대상으로 설정한다. 사람들은 이제 건축을 자연의 일부가 아닌 분리된 대상으로 이해하려 한다.

이런 상황은 20세기 이래로 오늘날까지 건축의 세계를 지배했던 “콘크리트기법”으로 더욱 심각해졌다. 쿠마(Kuma)에 따르면 한 건물의 객체로서 건축은 환경과의 관계로 나누어진다. 이 문제는 형식주의의 장려로 더 악화 되었다.

그 방법으로 주위 환경으로부터 객체를 제거한다는 쿠마(Kuma)의 생각은

반(反) 오브젝트의 사상을 달성할 수 있게 해주었다. 1991 년에 에히미(Ehime) 현에 위치한 기로산(Kiro-san) 전망대는 건물 전체를 언덕에 묻음으로써 문자 그대로 건축물을 지운 첫 번째 프로젝트이다. 그는 관측소가 객체로서 기존의 건축물이 취한 형태와 비교할 때에는 비어있다고 주장한다.

쿠마(Kuma)는 건물의 큰 부피를 줄이기 위해 건물을 더 작은 요소로 설계함으로써 반(反) 오브젝트에 대한 개념을 발전시켰다. 쿠마(Kuma)의 표현으로 그는 이 기술을 “미립자화”건축 이라고 정의했다. “미립자화”라는 개념은 건축적 요소에만 국한되는 것뿐만 아니라 다른 사람들에 대한 어떤 문제의 지배를 피할 수 있다고 주장한 그의 철학으로서 작용된다. 이것은 그가 “콘크리트기법”의 우위를 정복하기 위해 건축 자재의 다양성에 대해 파고들게 하였다.

그러나 건축 재료에 대한 그의 열의는 그가 반(反) 오브젝트 대신 건축을 객관화 하게 만들었다. 독일 철학자 마틴 하이데거(Martin Heidegger)에 따르면, 우리가 무언가의 특성을 탐구하려고 할수록, 우리는 그 특정한 것의 본질로부터 멀리 떨어져 있다. 만일 우리가 원래의 본질, 즉 그 존재의 본질로 돌려 놓으면, 그 물건의 객관적 존재는 우리에게 들어난다.

이 연구는 마틴 하이데거 (Martin Heidegger)의 철학을 켄고 쿠마(Kengo Kuma)의 반(反) 오브젝트 건축을 논의하는 참고 자료로서 그의 존재 현상학(phenomenology of thingness)에서 채택했다. 하이데거(Heidegger)에 따르면, 서구에서 널리 퍼진 사고 방식은 사물을 단순하고 분리된 것으로

간주한다. 이 때문에 직접적인 인간의 경험은 무시되었다. 이 객체의 개념은 하이데거(Heidegger)에게 너무 추상적이고 과장되며 일상의 경험과는 동떨어진 것으로 부적절하고, 이것이 과학 세계의 관점이 선전하는 것이다.

쿠마(Kuma)는 건축물과 자연 환경 사이의 관계를 복원하기 위해 물체의 거대 함을 제거하고 줄이려고 시도한다. 그러나 하이데거(Heidegger)에 따르면 사물과 자연 세계는 상호 의존 관계에 놓여있다. 달리 말하면 건축은 인간과 자연 사이의 관계를 복원시키는 것이다. 그러므로 관계는 분리된 객체의 상태 대신 그 사상의 출현을 통해 복원이 되었다.

쿠마(Kuma)의 반(反) 오브젝트 건축에 대한 깊이 있는 이해와 토론이 본 연구에서 제공되었다. 또한 이 연구에는 어떻게 그의 반(反) 오브젝트 전략이 실생활에서 시행 되었는지에 대한 이해를 돕기 위해 1990년에서 2000년 사이에 만들어진 쿠마(Kuma)의 선정된 프로젝트가 포함되어 있다.

키워드 : 켄고 쿠마, 반(反) 오브젝트, 마틴 하이데거, 물(物), 관계

학번 : 2015-22316